

CITIZEN PARTICIPATION IN A BART CORRIDOR PROJECT:
AN ANALYSIS OF THE NORTHWEST SAN FRANCISCO RAPID TRANSIT
EXTENSION STUDY, 1972-4

28 MAY 1976.

RICHARD WARREN SMITH
DEPARTMENT OF ARCHITECTURE
COLLEGE OF ENVIRONMENTAL DESIGN
UNIVERSITY OF CALIFORNIA, BERKELEY

R.W.SMITH
28 MAY 76

i

HE4491
S45563

1976
ENV I

CONTENTS

1. INTRODUCTION 1
2. SUMMARY 3
3. PURPOSE AND GENERAL DESCRIPTION OF THE NWX STUDY 6
 - A. STUDY PURPOSE 6
 - B. ASPECTS OF THE STUDY AREA 7
 - C. THE STUDY TEAM 8
 - D. THE STUDY PROCESS 11
4. HISTORY OF THE PROJECT WITH EMPHASIS ON CITIZEN PARTICIPATION 15
 - A. PRE-STUDY CLIMATE FOR CITIZEN PARTICIPATION 15
 1. National 15
 2. Bay Area 18
 3. In The Corridor 20
 - B. THE REQUEST FOR PROPOSAL (RFP) 23
 - C. THE PROPOSAL AND CONSULTANT SELECTION
 1. The Proposal 25
 2. Consultant Selection 27
 - D. THE RESULTING WORK PROGRAM 29
 - E. THE PROJECT ORGANIZATION AND STRUCTURE 33
 - F. THE CITIZENS ADVISORY COMMITTEE 42
 - G. THE CITIZEN'S LIAISON CONSULTANTS 60
 1. Establishing The Need For The CLC 60
 2. Selecting The CLC 63
 3. The Contractual Arrangements With The CLC 65
 4. Role Of The CLC In The Study 66
5. DILEMMAS 71
 - A. THE FIRST DILEMMA: MUTUAL TRUST BETWEEN CITIZEN AND CONSULTANT 71
 - B. THE SECOND DILEMMA: LIMITED PARTICIPATION EVEN WITH CONCERTED EFFORT 74
 - C. THE THIRD DILEMMA: WORKING AGAINST CITIZEN ORGANIZATION PRE-CONCEPTIONS 76
 - D. THE FOURTH DILEMMA: BREAKDOWN OF THE MORPHOLOGICAL DESIGN PROCESS 77
 1. Refusal Of The Citizens To Rank Criteria 77
 2. Abandonment Of The Morphological Approach 79
6. A STATISTICAL ANALYSIS OF CITIZEN PARTICIPATION IN THE CORRIDOR 81
 - A. PROFILE OF THE CORRIDOR FROM 1970 U.S. CENSUS DATA 81
 1. Overview 81
 2. Specific Demographic Characteristics 81
 3. Transit Planning Factors And Issues 86
 4. Existing (1972) Major Transit Lines 87
 5. Estimated Block Level Transit Usage For Work Trips In The Corridor 88
 - B. PROFILE OF MID AND OUTER CORRIDOR AREAS 89
 - C. REGRESSION ANALYSIS OF CENSUS DATA AND PARTICIPATION LISTS TO DETERMINE FACTORS ASSOCIATED WITH PARTICIPATION 99
 1. Method 99

2. The Regressions	106
D. CONCLUSION - FINDINGS OF THE REGRESSION ANALYSIS	110
E. LIMITATIONS OF THE REGRESSION ANALYSIS	112
7. IMPLICATIONS AND CONCLUSIONS	114
A. IMPLICATIONS OF THE STATISTICAL ANALYSIS	114
B. THE DILEMMAS: WHAT HAS BEEN LEARNED? WHAT COULD HAVE BEEN DONE?	116
C. CONCLUSIONS: IMPLICATIONS FOR THE STRUCTURE AND CONDUCT OF TRANSPORTATION PLANNING IN THE BAY AREA	122
1. Perceived Need: A Call For Reconnaissance	122
2. The Request For Proposal (RFP), Proposal, And Contract Work Program: The Need For Continuity And Integration	123
3. The Board Of Control: The Need For Appropriate Representation	125
4. The Citizens Advisory Committee: Helpful Only In Certain Contexts	126
8. REFERENCES	127

1. INTRODUCTION

This report is a case study and quantitative analysis of citizen participation in a major transportation planning project in San Francisco conducted during 1973 and 1974. The questions the analysis addresses are generally: Why did some citizens participate and others not? Are there significant differences between these two groups? What has been learned and what could have been done? The study concludes with a series of recommendations regarding transportation planning projects in the Bay Area.

The Northwest San Francisco Rapid Transit Extension Study (NWX study) spanned 22 months of consultant activity aimed at defining the short and long range transit issues and needs of the Geary corridor within local, city-wide, and regional contexts. The study concluded with a consultant recommendation for short and long range transit plans which the study team viewed as fully addressing the issues and needs of the corridor.

Considerable data on participation and records of the study process were produced during the course of the study. In addition, data was produced on "non-participation", that is, areas of the corridor that resisted attempts by the study team to develop participation. The wealth and variety of information and the extensive commitment of moral and material resources to citizen participation makes the NWX study a valuable case

R.W.SMITH
28 MAY 76

2

study - thus this report. Much credit in the regression analysis is due to Thad Usowitz of BART staff for assistance in setting up and interpreting the computer runs.

2. SUMMARY

Citizen participation in the NWX study was successful but very limited. It was successful in that it helped produce a relatively high degree of mutual trust between the consultant and citizen; and because there was a fair degree of creative involvement by some of the approximately three hundred citizen participants.

However, it was limited in the sense that there was not much variety in the participant groups considering the variety of communities, socio-economic, and ethnic groups in the corridor. The dominant group was, as might be expected, white, middle class, middle income, and relatively well educated.

The limitations of citizen participation in the study were not due to the lack of moral and material commitment by the consultant or project administration, but due to their lack of understanding of citizen participation processes - or what may be called primitiveness in the "state of the art" - as the techniques employed in the study were generally advanced compared to other studies. Limitations in the effectiveness of citizen participation in the study were also due to biases toward the dominant group of citizens by a key member of the Board of Control, control of the Citizens Advisory Committee by the dominant group, and biases of the Citizen Liaison Consultant. While these biases had occasional overt expression, their over-

whelming effect was in the structure of the participatory organization in the study. The "covert" effect of these biases was the emergence of a form of participation which was oriented toward socio-economic groups, such as the dominant group, thus making it perhaps impossible for the study to attract participants not in the dominant socio-economic group.

The findings of the quantitative analysis - multiple linear regression of participation and census data - are somewhat surprising and in several ways do not confirm the findings of related studies in other areas. The major factors associated with participation within areas of a relatively homogenous ethnic-socio-economic community in the corridor, are, in order of importance: persons with college education, persons who use their automobile or a taxi to get to work, and a low proportion of owner-occupied homes. Within areas of the same community, the factors associated with non-participation, or "resistance" to participation are, in order of importance: a high proportion of renter-occupied units, a high market value of owner-occupied homes, and a low unemployment rate.

Although the regression analysis did not deal with the Western Addition - a predominantly minority area comprised of blacks and Asians - because of a lack of participation data, a number of observations are made relative to census data and other research. In addition to being more oriented toward immediate, or "survival" issues and less oriented toward future

related projects - ie. planning - there are some significant differences in tract data between the Western Addition and the Richmond, the high participation community. In addition to having lower median family income and educational attainment, there were fewer workers per household, lower auto ownership, higher proportion of renter-occupied units, higher vacancy rate, and shorter length of tenure. One or more of these factors are generally associated with low participation rates.

The conclusions to this study are in four areas. First, a pre-study reconnaissance is suggested as a way of defining the issues, political, and community contexts prior to committing the study to a specific organizational structure and purpose. Second, the project administrators should participate in all phases of the RFP-proposal-contract cycle to ensure continuity and integration, especially when the consultant is a consortium of firms. Third, the Board of Control - or client body of the study - should be only provisionally organized until the reconnaissance study is completed; after which, the Board can be organized to actively represent the various communities and interest groups in the area affected by the project. Fourth, and finally, the Citizens Advisory Committee should be seen as only one of the forms of organizing participation, and that the selection of the CAC form is appropriate only in middle class, middle income areas that are also high in educational attainment. Its use in other contexts induces a bias toward that socio-economic group in terms of participation.

3. PURPOSE AND GENERAL DESCRIPTION OF THE NWX STUDY*

The Northwest San Francisco Rapid Transit Extension Study (NWX) had a duration of over a year and a half. The conclusions to the study were reached by a team composed of four consultant firms having a full range of expertise including construction and transportation engineering, transportation planning, environmental planning and urban design, financing, implementation, economics and community involvement. The study team was also composed of a variety of city, regional and federal agencies, and included the active participation of over 300 study area residents.

A. STUDY PURPOSE

The purpose of the NWX Study was, generally stated, to develop a comprehensive plan for improved transit facilities in the "Geary Corridor". In addition to providing better local, city-wide and regional transit service, the improved system was to lead to a reduction in overall transportation-related environmental impacts. It was also to support neighborhood conservation efforts and any transit-induced new development was to conform to city policies in terms of location and intensity. The conclusion of the study--essentially the consultant team recommendation--represented the best effort to achieve these purposes from the widest possible point of view.

*From the NWX Draft Final Report, published 2 August 1974.

B. ASPECTS OF THE STUDY AREA

The 1970 U. S. Census showed that, in the NWX study area, 40 percent of the employed persons used transit to get to work, while 40 percent used autos and 20 percent walked. The census also showed that 30 percent of the work trips were to the Central Business District (CBD), while 70 percent went elsewhere in the city or region. However, a major portion of these non-CBD work trips had destinations within the study area--particularly between the CBD and Masonic Avenue. In addition, this part of the corridor is the location of many attractions of city-wide and regional importance.

The study team found that it took up to 50 minutes to get from the west end of the corridor to the center of the CBD during the morning rush hour. Also, it was expected that the use of the automobile for work trips to the CBD would become increasingly ineffective due to traffic congestion and scarcity of parking places. In addition to the slight increase in number of households expected in the study area over the next decade, there was a trend toward more workers per household. This, together with less reliance on automobiles, was expected to produce increasing demands for improved transit service both in quantitative and qualitative terms.

All of these factors lead to questions dealing with the interrelationships between cost, level of service and impact. What is the right balance which does not incur burdensome cost, undesirable environmental and developmental impacts, yet provides the level of service required to maintain the viability of living

in Northwest San Francisco? This question was especially important in view of the increasing attractiveness of other parts of the Bay Area.

C. THE STUDY TEAM

The study team was composed of a Board of Control, a consultant team, a technical advisory group composed of city, regional and federal representatives, and a citizens body. The Board of Control (BOC) was the decision-making body, or client, for the study and was composed of BART and MTC commissioners and San Francisco supervisors. It was responsible for selecting the consultant team, approving the work and authorizing payment to the consultant team. The BOC was generally responsive to the political feasibility of the consultant team's technical work and, because of this, was particularly sensitive to the commentary and viewpoint of the citizen body. The BOC was also concerned with the technical soundness of the consultant's work and its conformance to other planning and technical work in the city and region. For this reason, the Board had the technical body review the consultant's work prior to acting on it. Thus, the Board of Control had citizen and agency review of the consultant team's work before the Board reviewed and approved the work.

The citizen group was composed of the Citizens Advisory Committee (CAC) and its subdivisions. An "ad-hoc" CAC was formed from over 60 citizen and special interest groups active in the corridor prior to the selection of the consultant team--in fact,

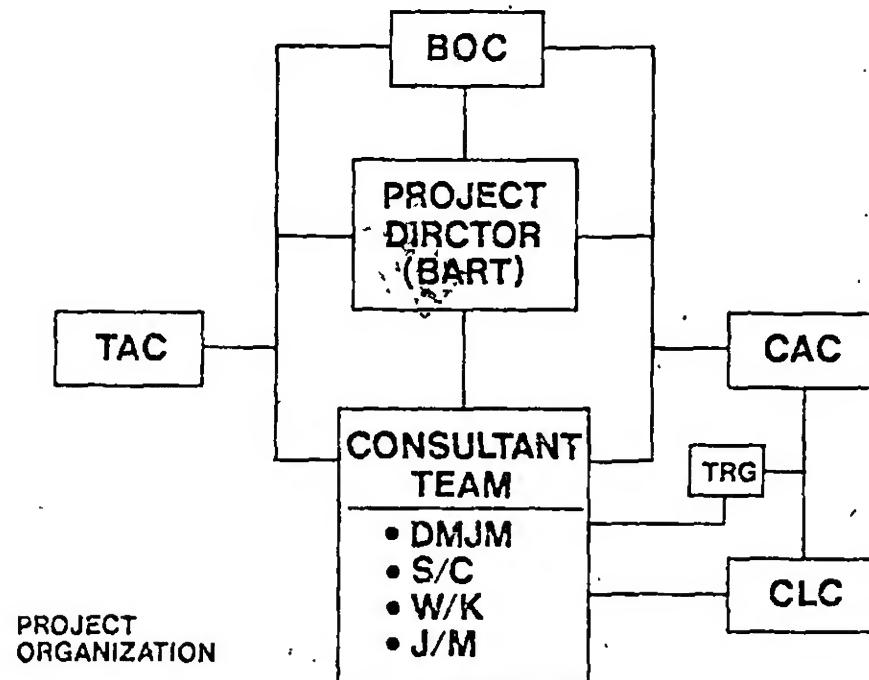
The ad hoc CAC took part in the selection procedure. Subsequently, a duly-constituted CAC was formed. Previously the ad-hoc CAC had formed a Citizens Steering Committee (CSC). The CSC, jointly with the consultant team, selected, with the approval of the CAC, a Citizen Liaison Consultant (CLC) whose purpose was to facilitate a two-way communication between the consultant team and the community interests of the study area. This two-way communication was characterized by the technical work being made understandable to the citizens and the citizen viewpoint being considered and incorporated into the technical work.

Some citizens were particularly interested in certain parts of the study. The study was divided into 12 parts, or tasks. This gave rise to the Citizens Task Review Group (TRG) which was formed at the commencement of work on each task. The TRG provided the citizens with a more penetrating understanding of the consultant's work and provided the means for incorporating the citizens' ideas, values and information in the consultant's work as the work progressed. The advantages of the TRG were that it provided an opportunity for citizen input, rather than simply review, and allowed a deeper mutual understanding between consultant and citizen. It also promoted active involvement because the citizens were there as a result of their interest. It promoted variety because each TRG had new people who could sustain a short-term intensive involvement and thus bring new points of view into the mainstream of the study.

The Technical Advisory Committee (TAC) was composed of staff members of a variety of city, regional and federal agencies including

the San Francisco Departments of City Planning, Public Works, the Redevelopment Agency, Public Utilities Commission, Municipal Railway; the Golden Gate Bridge, Highway and Transportation District, BART, Metropolitan Transportation Commission, the National Park Service and Urban Mass Transportation Administration. In addition to being involved in consultant team selection, the TAC was responsible for reviewing the consultant's work for compliance with the various agencies' planning programs and standards and general technical soundness. This review generally took place at two points: First, where the consultant team was dealing with significant or difficult technical issues or where the resolution of these issues had significant policy implications. Second, where the consultant had concluded a task in the work program and would subsequently present the work to the Board of Control for approval.

The consultant team was composed of Daniel, Mann, Johnson, & Mendenhall as prime contractor and chiefly responsible for transportation planning and urban design. Sedway/Cooke was chiefly responsible for policy analysis, implementation, and social and environmental impact analyses. Williams-Kuebelbeck was responsible for economic impact analysis, and Jordan/Mathis was responsible for engineering and construction costs. The project was administered by BART staff. These interrelationships are shown in the following diagram--Project Organization.



Key:

BOC	-	Board of Control
BART	-	Bay Area Rapid Transit
CAC	-	Citizens Advisory Committee
TRG	-	Task Review Group
CLC	-	Citizens Liaison Consultants
TAC	-	Technical Advisory Committee
DMJM	-	Daniel, Mann, Johnson, & Mendenhall
S/C	-	Sedway/Cooke
W/K	-	Williams/Kuebelbeck
J/M	-	Jordan/Mathis

D. THE STUDY PROCESS

The planning process used in the study progressed through several stages in working toward a conclusion. Although, in retrospect, the process appears to be a series of sequential stages, it was a highly recursive, non-linear, simultaneous process. However, for simplicity and clarity, it is best to present the

process as a series of stages. Over a period of a year and a half, the consultant team worked with public officials, public agency representatives and technical staffs, residents of the study area and other interested citizens. The intent was to open the planning process to a wide range of technical expertise, political acceptability and community values to achieve a study team recommendation that would be sound, feasible and would have broadly-based community support. This involved several stages:

Stage 1: The development of a Policy Framework and Criteria to identify desirable transit improvements and to guide their development.

Stage 2: The definition and development of alternative transit system components, such as vehicle (mode), guideway, network, etc., which could be assembled into alternative transit systems.

Stage 3: The development of a series of preliminary transit improvement alternatives which, in whole or in part, represented the scope of possibilities in the corridor. These alternatives were subjected to an evaluation based on policy and criteria compliance and physical feasibility. This evaluation indicated the desirability of the alternatives, and parts of the alternatives, from a corridor-wide basis and from a segment-by-segment basis.

Stage 4: The alternatives were grouped by a combination of three factors--level of service, level of capital expenditure, and general configuration. Based on the evaluation described in Stage 3, alternatives which best represented their respective groups were identified. These were then combined, modified and generalized

to become the five alternative concepts which the NWX team recommended for further study.

Stage 5: The Citizens and Technical Advisory Committees, by resolution, supported the recommendation, and the Board of Control, on 11 November 73, approved the five concepts for further refinement.

Stage 6: Further Concept refinements were made by the study team and approved for analysis and evaluation on 28 March 74 by the Technical and Citizens Advisory Committees and the Board of Control. Two major developments occurred in the refinement of the Concepts: 1) A view of some of the features of the Concepts as components which could be studied independently of other components and then reassembled into highly-refined Concepts. 2) A view of the Concepts as being sequentially related in terms of one Concept evolving into another Concept or one Concept evolving through the sequential addition of components.

The five Concepts were then subjected to a rigorous analysis and evaluation utilizing the 66 Criteria developed in Stage 1 as a basis.

Stage 7: At the conclusion of the analysis and evaluation of the Concepts, the study team made a presentation at a widely publicized Town Meeting held on 23 May 74. The intent was to expose a wider public to the Concepts and the study team's evaluation, and to obtain community response to both the Concepts and the evaluation of the Concepts. In view of the response at the Town Meeting, and based on the evaluation of the Concepts utilizing

the Criteria and Policy Framework for the study, the consultant team prepared a draft summary evaluation and recommendation.

Stage 8: The evaluation and study team recommendation were presented to the Technical and Citizens Advisory Committees on 18 June 74 and to the Board of Control on 18 July 74. The Final Report is the body of that recommendation and marked the conclusion of the study.

The public and various public agencies will continue to review the conclusions to the study and will take whatever action that is appropriate to their purposes and within their capabilities.

4. HISTORY OF THE PROJECT WITH EMPHASIS ON CITIZEN PARTICIPATION

A. PRE-STUDY CLIMATE FOR CITIZEN PARTICIPATION

1. National

The lead in citizen participation in public projects was taken in the Federal Urban Renewal program in the early 60's. There were arguments of equity and efficiency. Critics of the earlier Urban Renewal program argued that the inner city residents were displaced by renewal projects because the projects were usually intended and inhabited by persons more wealthy than those displaced. It was therefore argued that renewal projects should be oriented more toward the residents of the renewal areas--the urban poor; that the resident's needs and values be incorporated into the projects so that they also could live in them. However, it was argued (Gans '63) that the planners were typically middle class, white, and were not fully cognizant nor appreciative of the needs and values of the urban poor. The long-range solution to this would be the emergence of planners from the urban poor. The immediate solution was to incorporate the local residents into the planning process where they could interject their needs and values.

There are two sides to the efficiency argument. On the one hand, planning projects incorporating citizen participation consumed more time and proved troublesome to Urban Renewal administrators (Wilson '66). On the other hand citizen participation was often

essential to the development of acceptability and final approval of the plan even though it usually played little role in determining the contents of the plan (Dentler '61).

By the late sixties, the renewal programs had become regarded as an ineffective technique for rehabilitating central cities and was largely abandoned. But the ground had been broken for citizen participation in federal projects and much of what had been learned was transferred to the federal highway programs.

While there had been little participation in highway projects prior to 1960, the process gained momentum and by the late 60's had become so powerful that it brought many urban freeway projects to a halt (Lathrop '71). The Department of Transportation had become "enlightened" by the late 60's and early 70's and produced a policy framework for transportation planning projects which required extensive citizen participation. But DOT became enlightened very rapidly, and too late to save many highway plans from being scrapped because of popular opposition. Policies & Procedure Memorandum (PPM) 20-8 January 14, 1969 introduced the requirement for two public hearings in federally assisted facilities; one prior to route location (corridor) approval and one prior to specific design approval. In other words, public participation was to be limited to the "expression of views" after the completion of general and specific designs. But nowhere in this PPM does the term "citizen participation" appear.

In less than a year PPM 50-9 was issued (November 24, 1969) and required continuous citizen participation from the spelling

out of goals through the choice between alternatives. Moreover, the agency responsible for the planning process was required "to inform the public completely, to obtain the public views, and to use these views in developing transportation plans." On September 21, 1972 PPM 00-4 was issued and added to the requirement that the planning process, in which the public was to be fully and continuously involved, was to include consideration of "reasonable alternatives, including the alternatives of not building the project and alternative modes." In other words in less than four years federal transportation planning policy had become enlightened--from the nominal exposure of project planning in two public hearings to full involvement where public participation could lead to the abandonment of the project or the selection of other modes--in effect another project.

But the federal policies on public participation were "too little and too late." They were a response to what had been demanded for years in major urban transportation studies--San Francisco, New Orleans, and Baltimore, for example. And their provisions were met in some projects several years before the relevant PPM's: the Baltimore Interstate Highway System project was begun in 1967 and actually practiced the provisions of PPM 90-4 (September 1972); the Boston Transportation Planning Review was begun in 1971 and went well beyond PPM 90-4.

Even though federal policy was perhaps conservative relative to many concurrent planning projects it had changed dramatically in a short time creating implementation problems for an institution which had become known for its stagedness. The regional offices of DOT were responsible for ensuring that state and local

agencies complied with and carried out federal policy. But as late as mid-1973 the regional offices had little understanding of processes of public participation and could scarcely guide state and local agencies--they characterized their situation as "the blind leading the blind" (Brown '73) and looked to Washington for guidance. The highway people had heard complaints from the public for over a decade; their projects were closed down by public demand because of their insensitivity to public input; and they apparently never knew why.

2. Bay Area

For the most part freeways were welcomed in the Bay Area, except in San Francisco, up to the early 70's. This of course is due to two factors: 1) freeways in the Bay Area are located mostly in suburban areas where there is little or no displacement; 2) freeways tend to provide service to suburban areas while they tend to produce disruption in urban areas.

Aside from bringing all freeway projects--except I-280--to a halt in San Francisco by 1959, public participation (opposition) had another lasting effect. It caused the creation or strengthening of a number of neighborhood groups and a coalition of neighborhood groups (Lathrop '71).

The "freeway revolt" in San Francisco was centered around issues which were to become the focus of many urban transportation projects in the country in the following decade. These issues generally were neighborhood disruption, environmental and economic impacts, and the larger questions of equity--inner city disruption vs. ease of suburban commuter access.

In many parts of the Bay Area, but particularly in San Francisco, the resolution of these issues appeared to be best achieved by transit rather than highway improvements. This lead to the approval of BART in the most urbanized counties and a "transit-first" posture in San Francisco among the neighborhood and political groups. The shift of hope to transit was further evidenced by the programming in 1970-71 of five concurrent BART corridor studies for the extension of rapid rail service in the Bay Area. One of these corridors was in San Francisco--the Geary Corridor from downtown to the ocean--thus the "Northwest San Francisco Rapid Transit Extension Study." All of these corridor studies were to have a high level of public participation in excess of and predating PPM 90-4 by two years.

Public participation in the important affairs of the City of San Francisco has been a reality for many decades. In 1906 the earthquake and following disastrous fire brought many individuals and community groups together in rebuilding the city. In 1910 the San Francisco Housing Association was formed by a group of citizens who were outraged at the quality of housing that was being constructed to replace the city's lost housing. This group was effective in obtaining the State Tenement House Act of 1911 which defined certain minimum standards for housing design. Through the decades this citizen group pressed for and obtained a public housing agency and a Department of City Planning for the city. In 1959, with prompting and financial support from downtown

corporations, the organization became the San Francisco Planning and Urban Renewal Association (SPUR) and since has become an entirely citizen-run organization supported by the annual dues of its 1400 members. It has received support from San Francisco corporations and San Francisco and national foundations to conduct a number of programs, studies and neighborhood organizational efforts.

One of the current purposes of SPUR is to help organize neighborhood organizations and provide them with staff and financial support. In 1970 SPUR assisted in the formation of the Planning Association for the Richmond (PAR) and provided them with a financial grant to enable them to hire a planning consultant to prepare a district and neighborhood plan. This PAR planning effort was in mid-process during the very early formative or pre-study stages of the NWX study and was to have tremendous impact on the study.

3. In the Corridor

By 1912 the Geary corridor had a dozen or more cable car lines operating in it with four of them having terminals at the ocean (Arnold '13). Until 1956 there had been a streetcar line operating the full length of Geary and was replaced by the present bus lines. Since early times to the present it has been the most patronized transit corridor in the city and perhaps in the country. There have been innumerable plans for transit

improvements in the corridor. In the 30's the first subway system for the corridor was proposed. Most notably the Northern California Transit Demonstration Project conducted between 1964-67 included a recommendation for a subterranean rapid transit line--an extension of the San Francisco Municipal system--out the Geary corridor (Simpson & Curtin '67). The City's Transportation Plan, approved by the City Planning Commission on 27 April 72, includes this Municipal system extension out the Geary corridor and includes an extension from downtown to the San Francisco Airport. This plan also shows a rapid transit line to Marin County, over the Golden Gate Bridge, and tying into the Geary subway.

There have been a variety, often contradictory, of plans showing BART extensions out the Geary corridor and north to Marin and Sonoma Counties. The Bay Area Transportation Study Commission recommended a BART extension directly from the financial district of San Francisco to Marin through a sub-aqueous tube across the Bay; it also showed a rail extension (BART or Municipal system) out the Geary corridor (BATSC '69). These alternatives were repeated--with the inclusion of a route crossing over the Golden Gate Bridge as an alternative to the sub-aqueous tube--in the Golden Gate Corridor Transportation Study, Phase I (Okamoto-Liskamm '70).

Needless to say, the residents of the corridor were highly sensitized to the issues relating to transit in the corridor by

the studies preceding the NWX study and many citizens asked initially why another study was needed. The Golden Gate Corridor Study was directed at the Marin commuter problem; the NWX study was to be broader--to investigate and make recommendations regarding transit service in the Geary corridor with interrelations to city-wide and regional transit including Marin commuter service.

The Golden Gate Corridor Study, Phase I, had a high level of public participation integrated into the study process. In addition to all of the provisions of the DOT PPMs it had a standing Citizens Advisory Panel (CAP) who were to be 1) a sounding board for ideas; 2) a link between the study group and the public; 3) generators of issues; 4) a means for resolving inter-group conflicts. The CAP was subdivided by issue categories (e.g., social, political, land use, etc.) and often prepared reports which were sometimes contradictory to the consultant's work.

In addition to being sensitized to transit related issues by studies preceding the NWX study the residents had strengthened their neighborhood and community organizations, they had learned that they could be effective and constructive participants in transit studies and they had come to expect a high level of participation. By the time the NWX study was being organized the project consultant staff for the Golden Gate Corridor Study had identified 70 potential neighborhood, community, civic, and special interest organizations. Of these 29 were identified midway in the NWX study as being active in, interested, or relevant to the NWX's study (NWX Interim Report #4, '73) but none as influential and

active as the Planning Association for the Richmond. These organizations became directly involved in the NWX study as members of the Citizen's Advisory Committee which will be discussed in detail in a further section of this report.

B. THE REQUEST FOR PROPOSAL (RFP)*

The request for proposal (RFP) issued by BART on 14 Jan 72 identified the purpose of the NWX study as to "provide for the planning and conceptual engineering of a rapid transit extension connecting the northwest section of the city with the BART/MUNI system in downtown San Francisco." Although the word "rail" had been stricken from the work program at the first Board of Control meeting on 11 January 72, the RFP was specific in limiting its concern to an implicit fixed rail system where only route alignment , station locations, and terminus were the only alternative factors to be considered. The RFP included preliminary engineering construction cost estimates, patronage and revenue estimates and concludes with a requirement for a draft EIR "in sufficient detail to satisfy Federal and State requirements." While this language was appropriate for the other BART extension studies it took on the specter of a "straw man" because no one seriously thought at that time there would be a BART extension in the corridor--if there were to be a fixed rail extension it was thought of as a MUNI extension. Therefore why was BART conducting the

*Much of the detail data on the project history is recorded in the minutes of meetings kept by BART project staff, the consultant record, the record kept by the Community Liaison Consultant, personal journal of consultant staff, project memoranda and other project documents such as interim reports, contracts, etc.

study rather than the City and County of San Francisco who would ultimately be the implementation channel for the study's final recommendations? This ambiguity was compounded by the commencement of the second phase of the Golden Gate Corridor Transportation Study which was to do similarly defined work in the San Francisco/Marin commuter corridor ~~and~~ which had obvious interrelations with the NWX study--but the question was why were they not joint studies. The answer of course is that BART was doing 'its' study, and the Golden Gate Bridge Highway and Transportation District (GGBHTD) was doing 'its' study while both would have to be implemented by the City and County of San Francisco. This ambiguity was nominally addressed by the appointment (subsequent to the RFP) of two San Francisco supervisors to the Board of Control of each study; but the ambiguity remained and perhaps was responsible for a lower level of interest in the NWX Study by the corridor residents. If the study had been called a BART extension study, or a MUNI Transit Improvement Study one could imagine that public interest would have been much more intense.

The RFP required the "direct participation of citizens in all phases of work," and expected citizen groups to review the methods, findings and conclusions of the study. The RFP also identified the formal inclusion of citizens in the study in the form of a Citizens Advisory Committee (CAC) which would consist of interested city-wide and neighborhood groups and would be responsible for advising the consultant and Board of Control on

community related issues pertaining to the conduct and conclusions of the consultant. The CAC was to review all of the consultant's work--the methods, findings and conclusions--which meant that the consultant would have to have close liaison with the community and would have to write essentially non-technical reports.

C. THE PROPOSAL AND CONSULTANT SELECTION

1. The Proposal

The proposal* in response to the RFP emphasized citizen participation to an extent beyond the provisions of the RFP. It stressed informal public participation to be integrated into the planning process and was expected to provide a "source of detail and otherwise unknown information," and, "aid in precise and detailed decision making". The proposal stressed that citizen participation would be actively solicited; if sufficient representation was lacking the study team would attempt to structure broader representation, particularly among the elderly, the young, and minorities. To facilitate the desired level of participation the proposal included a provision that the consultant's work would be conducted in an office especially set up for the.

*The successful proposal by Daniel, Mann, Johnson, & Mendenhall in association with Sedway/Cooke, and other firms, was authored by R. W. Smith with the assistance of George Wolfson, both of DMJM at the time. In addition to their personal experiences on other projects involving citizen participation, the source for many of the notions regarding citizen participation was a study conducted by the author, published later: A Theoretical Basis for Citizen Participation (Smith '73).

study and located in the corridor. This office was also to be used for presentations to citizen groups, and would provide space for continuous displays for citizens to review at any time. The proposal also included provisions for publicity for the study. The intent was to generate wide interest in the study by the distribution of flyers and the employment of other media.

An important feature of the proposal was a departure from the conventional process of generating whole-system alternatives which are evaluated and one is selected for recommendation. Instead, the morphological approach (Zwickly '66) was proposed. In this approach a system is broken down into its components (route, mode, guideway, network, financing, etc.) and studied independently, redesigned, refined, etc.. The individual components are then evaluated and whole system alternatives are generated by combining the best performing components.

This approach was proposed because it provided a means for decomposing a complex system into a series of parts which citizens could manage in terms of understanding the appropriateness and merit of each component. In other words, it promised a means for directly involving citizens in every level of the study in a meaningful way. Also it was thought that it would be easier to generate consensus in design of components and in the progressive, step-wise assembly of components: an incremental consensus-building process rather than the usual Alternative A vs. Alternative B process. In other words, the planning process

was structured to facilitate citizen participation.

The proposal indicated major involvement of citizens, individually or by groups, in several tasks defined in the RFP. These included: identification of policy issues; determination of policy and strategy ~~for~~ the study; development of evaluation criteria; generation of alternative system components; evaluation of alternative system components; assembly of components into a whole system; recommendation of system for adoption by the Board of Control. In addition, there were two other tasks where the citizens were to play a less important role (data collection and impact analysis).

2. Consultant Selection

The proposal was successful in securing the contract for the study because it was strong in three areas of concern: personnel (competence, experience, workability); technical work program; and citizen participation. The first two areas lead the Technical Advisory Committee to recommend (TAC 17 March 72) the consultant to the Board of Control (BOC). However, at the BOC meeting (19 May 72) where the TAC recommendation was made there were three important factors: 1) Supervisors Molinari and Gonzales had been appointed to the BOC by the San Francisco Board of Supervisors. Molinari stated that his main purpose was to ensure that citizen interests--especially the Richmond residents--were served by the study; 2) Molinari asked where the study office was to be located--the proposed corridor location satisfied this

concern; 3) the citizens insisted that they be permitted to review the proposals and make their recommendation to the Board to be considered together with the TAC recommendation.

The meeting concluded with the understanding that the citizens would review the six proposals, interview the two top consultant consortiums and make a recommendation at the next Board meeting. However, the citizens were instructed by the Board to limit their concerns to the consultant's ability and interest in citizen participation and to which one they would most like to work with.

Interested citizens reviewed the proposals and a meeting was held (11 July 72) where the study program was presented and the two consultant groups made presentations and answered questions. Approximately 70 citizens were in attendance. Their concerns were generally: 1) the openness of the proposed work program, e.g., whether the bus mode would be entertained--whereas the TAC was interested in the work program limiting the mode to fixed rail (TAC 25 February 72); 2) openness of the study process to citizen involvement at all levels--there were specific questions as to how this would be achieved; 3) the location and availability of the site office proposed by one of the consultant consortiums. At this meeting the citizens voted by a clear majority (2 to 1) to recommend the same consultant consortium (DMJM et al.) as the TAC had recommended. This recommendation for consultant selection was accepted by the Board (21 July 72) and a motion to enter into contract was passed.

The following roles may be summarized: the TAC had been primarily concerned with the technical aspect of the proposals, the firm's "track record" and manner of working; the citizens were concerned with the openness and responsiveness of the study to the citizens' viewpoint at all levels of study; the Board was interested in the concerns expressed in the recommendations of both the TAC and citizens groups and was also interested in the larger political acceptance of the consultant consortium.

D. THE RESULTING WORK PROGRAM

The work program that formed the contractual work to be done by the consultant consortium resulted from three major factors: 1) the original RFP; 2) the proposal; 3) negotiations between the prime contractor (DMJM) and the three other firms who comprised the consortium and were to be sub-contractors. Subsequent to the selection of the consultant, the proposal had to be converted to the work program that spelled out in detail the work that the consultant would do. The BART project coordinator insisted that BART management, and ultimately the federal Urban Mass Transit Administration (UMTA), wanted to see the consultant's proposed work program revised to specifically reflect the work items in the RFP. By doing this there were two major problems introduced into the final work program. First, the RFP was only addressed to a rapid transit extension--the only questions were mode (i.e., BART or MUNI light rail), route, and station locations.

This was a problem because the proposal was more open on the type of transit to be considered. Earlier studies (Simpson & Curtin '67) had suggested a "bus subway" as a possibility--this was being investigated in the Golden Gate Transportation Corridor Study, Phase II, and it had been mentioned by the Director of Transportation of the S. F. Public Utilities Commission (TAC 25 February 72). Consequently the bus mode appeared to need study. But the RFP was open only to alternative rail modes and transit related urban development. In fact there was no task in the RFP which dealt with the identification, generation, or design of alternative transit systems for the corridor; only route and station locations. As a result, the contractual work program, brought into conformance with the RFP, dealt only with alternatives in route and station locations and the alternative rapid transit modes (implicitly BART or MUNI light rail). It should be noted that at the Board of Control meeting of 11 January 72 the purpose of the study was "clarified"--all reasonable modes of transit were to be studied, not just rail modes. But this "clarification"--actually an expansion of the scope of concern--was made apparently after the RFP had been written. The RFP made no mention of all reasonable modes--only all reasonable routes and station locations--for an implicitly line-haul rapid transit system.

The second effect that revising the work program to conform to the RFP was to change the way that alternatives were to be generated, analyzed and evaluated. The RFP implied alternatives

in the form of whole systems--e.g., BART mode and one route and set of stations or another route and set of stations; or the "red route, green route, blue route" approach that had been used by highway planners. The proposal on the other hand, proposed the morphological approach (mentioned earlier) as a way of not only achieving an optimum transit design, or alternative designs, for the corridor but as a way of effectively involving the citizens in the project incrementally and at a manageable level. The contractual work program was, as a result, confusing; it required the "red route/green route" approach but used many of the terms and phrases employed in the proposal to describe the morphological approach. Moreover, the part of the contract outlining the general study approach was, verbatim, taken from the proposal describing the morphological approach.

The project office that was included in the proposal was included in the prime contract general conditions along with the requirement that a regular professional staff person be at the site office from 9 a.m. to 5:30 p.m. on Saturdays for the duration of the project. The consultant was also required to participate in an indefinite number of presentations and workshops with citizen groups and participate in two public hearings. The contract provided that the consultant engage an individual or firm as a sub-contractor to provide liaison services between the consultant and community. The amount of this sub-contract was to be \$25,000. This arrangement will be discussed in detail in a following section of this report.

The final set of factors influencing the transformation of the proposal into the contractual work program was the negotiations between the prime and sub-contractors regarding the division of the work to be done relative to the portion of the fee each received. The basic problem is twofold: First, in multi-disciplinary teams there is always an overlap in competencies--responsibilities in these overlap areas are often left ambiguous until the sub-contract is written, then the differences in expectations emerge. The second aspect of the problem is that often each member firm of the consortium expects a larger portion of the fee than is received and expects to do less work than they are assigned by the prime contractor.

In the NWX study these problems reached a critical state to the degree that one of the sub-contractor firms threatened to withdraw from the study and another sub-contractor firm developed a negative attitude that almost lead to a termination of their contract early in the study. These difficulties resulted in the sub-contracts being negotiated, modified and defined independent of the prime contract and further resulted in a set of sub-contracts which did not form a sub-set of the prime contract to a significant degree.

In summary, the resulting contractual work program had two major structural problems that were the result of the way it was produced. They are: 1) The conversion of the proposed participation oriented planning process to the product oriented process

defined by the RFP; 2) The lack of significant relationship between the prime contract work program and the sub-contract work programs.

E. THE PROJECT ORGANIZATION AND STRUCTURE

On 12 March 73, a month and a half after work on the project had begun, the "Project Organization and Structure" was issued. It was developed and issued in response to a variety of needs but focused on the two major problems in the contract work programs--design/planning methods, and relationship of the prime and sub-contract work programs. The following is an excerpt from the Project Organization and Structure:

"The intent of the Project Organization and Structure is to provide a common frame of reference and planning/design process for the NWX study. It should serve to inform the various members of the study team who the other members are, their roles and responsibilities, and how to contact them.

Part one - Project Organization - should indicate the complexity of the project because of the numerous and diverse actors, and the relationship of NWX to other transit study projects. Part One also briefly describes the various actors that comprise the team and the organizational structure that is implicit in the study.

In addition to having a common overview, or common conceptual framework for the study, a detail working reference is needed. Ordinarily this is provided by the prime and sub-contracts of planning studies. However, the NWX study is unusually complicated by the number of participating firms, the relationship to other transit studies, the inclusion of very active citizen

participants, and the brevity of the study. In addition, the prime and sub-contracts, having undergone numerous and extensive revisions, contain many procedural omissions and contradictions. Part Two - Structure - addresses these issues and is intended to provide a unified, coherent, and complete planning process. The Project Structure provides the team members - prime and sub contractors, community participants, and public agencies - with a detail working reference by which they can coordinate their activities. To facilitate this the following has been done:

- a. The Phases, Tasks, and Sub-Tasks have been described in detail.
- b. The relationships between the Sub-Tasks have been identified and, in some cases, described.
- c. The relative team member responsibilities for each Sub-Task have been described.
- d. The duration and time required to execute each Sub-Task have been estimated..
- e. Fourteen tasks where citizens workshops would be valuable have been identified.

In order for the NWX study to be successful, an on-going effort will have to be made in the direction of making a multidiscipline team into an interdisciplinary team. And further, by the effective inclusion of community members and public agencies, the interdisciplinary team may become a comprehensive problem solving team capable of credibly defining the problems to be solved, defining and evaluating alternative solutions, and making recommendations which may be implemented. All within the limits of community values, and political, technical, and economic viability. To do this it will be necessary to continually focus on the behavior of the team members, i.e., how do they interact in a problem solving context?"

The contents of the Project Organization and Structure were as follows:

PART ONE: PROJECT ORGANIZATION

- A. Project Description
- B. The Board of Control
- C. Inter-relationships Between NWX and the Golden Gate Study
- D. The Regional Travel and Transit Projection Project
- E. NWX Planning Process
- F. The Community Liaison Consultants
- G. The Citizens Advisory Committee
- H. The Technical Advisory Committee
- I. Contacts: Contractors, Consultants, Agencies
- J. Sub-Task Clusters and Identification
- K. Manhour Allocations by Task and Firm
- L. Sub-Task Characteristics

PART TWO: PROJECT STRUCTURE

- A. Use of the Project Structure
- B. Phase, Task, Sub-Task Definition and Inter-relations
- C. Project Organization Chart
- D. Contracts

It was noted that the prime and sub-contracts formed the basis of the work to be done since they were signed contracts. However, it was also noted that the interpretation of these work programs would be made in terms of the Project Organization and Structure. Therefore, and as the following excerpt shows, the Project Organization and Structure was a deliberate attempt to redefine the prime and sub-contract work programs in terms of the original proposal.

E. PLANNING PROCESS

"As noted in the original proposal submitted to BART, the process to be used in the NWX study would be characterized by: extensive citizens participation; continuous data gathering; highly cyclical or iterative methods; and the incremental combination of transit system components leading to a whole system that would be widely acceptable.

I. Process Phases

1) DEFINITION OF DATA FRAMEWORK. This phase establishes the means for receiving, storing and retrieving data during the study process. Data does not refer to reports and maps as such, but to the content of data sources. (Task 2)

2) THE DEFINITION OF A POLICY FRAMEWORK FOR THE STUDY PROCESS.

Existing policies regarding transit and transit related issues are identified and evaluated relative to the physical and socio-economic constraints of the corridor communities. The intent of this phase is to define a policy framework which has maximum conformance to existing policies and will effectively guide the study. Extensive community interaction and Board approval are important to this phase. (Task 1)

3) GENERATION AND DEVELOPMENT OF ALTERNATIVE TRANSIT SYSTEM COMPONENTS.

The components to the system have been defined as - Route, mode, station locations, feeder systems, joint and collateral development. Alternative configurations of these components will be generated, developed, and studied separately. In addition some preliminary combinations will be formed and evaluated. Community participation in the form of Workshops is important to this and the following three steps. (Tasks 3 and 4)

4) EVALUATION AND DEFINITION OF ALTERNATIVE SYSTEM COMPONENTS. The components and some partial combinations of components will be evaluated from an engineering, cost, impact, and urban design point of view. Also, in view of the array of alternatives generated by this point, a preliminary study of financing, implementation and patronage-revenue will be made. (Tasks 4 and 5)

5) INTEGRATION OF SYSTEM COMPONENTS INTO A TRANSIT SYSTEM. The remaining system components or partial system combinations will be integrated into a whole system or whole system alternatives and subjected to an evaluation based

on support and conformance to the adopted study policies and goals. (Task 6)

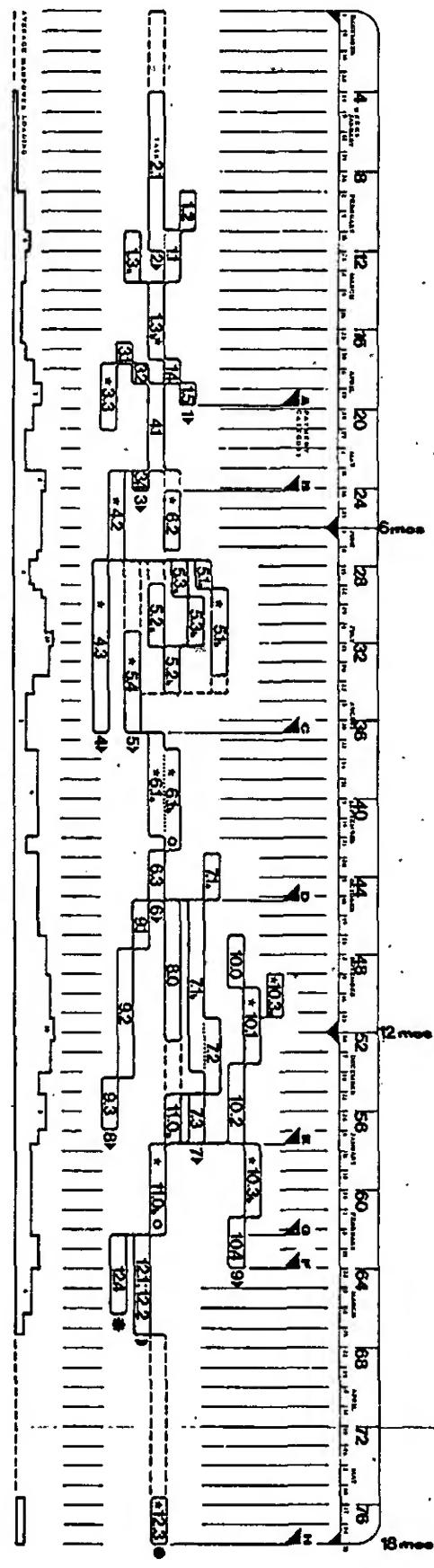
6) ADOPTION OF TRANSIT SYSTEM. One transit system will be recommended for adoption by the Board. (Task 6)

7) DEFINITION OF ADOPTED SYSTEM. The adopted system will be defined in terms of - engineering, social and environmental impacts, cost, patronage and revenue, and urban design. (Tasks 6,7,8,9,10)

8) DEVELOP FINANCIAL AND IMPLEMENTATION PLAN FOR SYSTEM. A financial and implementation plan will be developed for the adopted transit system. (Task 11)

9) FINAL REPORTS. A draft Environmental Impact Statement and summary and draft versions of the final report will be prepared. (Task 12)"

Phase 3 of the planning process was important in terms of defining the morphological process which was intended for the project in the proposal. The following excerpt from the Project Organization and Structure describes that phase, and following that description is a complete sub-task definition (sub-task 4.2) which gives detail definition of the process (morphological) to be used. It should be noted that verbatim language from the prime contract is used in the sub-task definition and that each subcontractor was given a key which identified the parts of their sub-contracts that were included in the sub-task definition. Following this page is a chart showing the entire task and sub-task sequence for the project.



NWX PROJECT ORGANIZATION

"SUB-TASK: 4.2 - IDENTIFICATION AND GENERATION OF COMPONENT AND SUB-SYSTEM ALTERNATIVES

ESTIMATED HOURS: 1,000

ESTIMATED DURATION: 4.2 weeks

RESPONSIBILITY DISTRIBUTION: (2, 1, 1, 0, 0)

PUBLIC HEARING: no

WORKSHOP: yes

INPUTS FROM:

SUB-TASK 1.3b: Determination and Evaluation of Policy Alternatives and Development of Recommended Strategy (1, 2, 0, 0, 0)

SUB-TASK 1.4: Determination and Adoption of Policy Framework and Recommended Strategy (1, 2, 0, 0, 0)

* SUB-TASK 3.1: Determination of System Criteria for BART & Muni System (1, 0, 0, 0, 2)

* SUB-TASK 3.3: Generation of Evaluation Criteria (1, 2, 1, 1, 0)

* SUB-TASK 4.1: Collection and Analysis of Data for the Development of Component and Sub-System Alternatives (2, 1, 1, 0, 0)

* SUB-TASK 5.3a: Collection and Analysis of Data for General Conceptual Engineering of the Component and Sub-System Alternatives (1, 0, 0, 2, 1)

CLC TASK h: Aid in the Determination of Development Proposals, e.g., Joint Development, etc. (Prime Contract Task 4.1, 4.2)

SUB-TASK DESCRIPTION

Sub-System and element alternatives are to include: a) specific route variations; b) station locations; c) station configurations, features, and markings; d) line termini; e) joint and collateral development configurations; f) transit modes; g) feeder systems; and h) community development.

Specific sub-system alternatives will largely result from the interaction of determined policy and goal set (Task 1.4), pertinent data on physical and functional constraints (Task 4.1), and the application of evaluation criteria (Task 3.3).

Based upon all reasonable alternative modes of transportation selected for examination, and evaluation criteria developed in Task 3, Consultant will prepare schematic alternative locations for stations and for connecting route linkages, or portions of routes, and corresponding sets of stations.

One purpose of this task is to define and evaluate potential alternative growth patterns related to transit alternatives for the Corridor. A non-transit alternative will be studied during this task to identify resultant planning and development effects on mobility, and physical, socio-economic, and environmental factors.

OUTPUTS TO:

- * SUB-TASK 4.3: Preparation of Urban Design Concepts and Report 4 (2, 0, 0, 0, 0)
 - * SUB-TASK 5.1a: Collection and Analysis of Data for the General Study of Impacts for Each Component and Sub-System Alternative (1, 2, 1, 1, 0)
 - * SUB-TASK 5.2a: Collection and Analysis of Data for the Development of Financial and Implementation Alternatives (0, 2, 1, 0, 0)
 - * SUB-TASK 5.2b: Development of General Financial and Implementation Alternatives (0, 2, 1, 0, 1)
 - * SUB-TASK 5.3b: General Conceptual Engineering of the Component and Sub-System Alternatives (1, 0, 0, 2, 0)
 - * SUB-TASK 5.4: General Patronage and Revenue Estimates; Report 5 (1, 1, 1, 1, 2)
 - * SUB-TASK 6.1a: Determination of Costs and Evaluation of Components and Sub-System Alternatives (2, 1, 1, 1, 1)
 - * SUB-TASK 6.1b: Integration of Components and Sub-System Alternatives Into a Recommended Transit System for the Corridor (2, 1, 0, 0, 1)
 - * SUB-TASK 10.1: Determine Specific Positive and Negative Impacts of the Transit System (1, 2, 1, 0, 0)
 - * SUB-TASK 10.3a: Define Urban Design Concepts (2, 1, 0, 0, 0)
-

PRODUCT OF THIS SUB-TASK:

COMMENTS

The attempt defined by the Project Organization and Structure was a failure in the sense that it did not achieve its purposes. It was too late to affect the work that went into Task 1, the policy framework for the study (NWX Interim Report #1: Policy Framework). However, it was effective in structuring Task 2, the information system (NWX Interim Report #2: Data Framework) and Task 3, the definition of criteria (NWX Interim Report #3: Criteria). The Project Organization and Structure became ineffective in Task 4 and the morphological process that it attempted to impose on the project was abandoned. However, the Project Organization and Struc-

ture was used through Sub-Task 4.2 - Identification and Generation of Component and Sub-System Alternatives. This sub-task was central to the Project Organization and Structure and to the morphological process and in large part formed the basis for the report defining alternatives (NWX Interim Report #4: Alternatives). The next sub-task cluster was to provide an analysis and evaluation of the sub-system components and would have preceeded the assembly of the components into a whole transportation system, but these sub-tasks were never executed in this sense. The reasons for not executing the analysis and evaluation of component sub-systems are complex but are in general: 1) the prime and sub-contracts did not clearly require the work to be done that way; 2) the work depended heavily on the sub-contractors who saw their sub-contracts as the guide for their work and did not want to engage in what appeared to be a more time consuming approach; 3) the citizens were getting impatient--they felt the work was overly abstract and they wanted to see whole system alternatives; 4) the citizens refused to rank the criteria that were to be used to evaluate the components--this was crucial to continuing to employ the morphological approach and will be discussed in a further section of this report.

The Project Organization and Structure was, however, successful in two principal ways. First, it provided a coherent body of information on the study, its purposes, the regulating and participating bodies, relationships to other studies, other consultants,

and the staffs of various agencies. Second, even though it was followed only partially through the study, about to the half-way point, it provided a point of departure. Being an integrated and complete approach it provided a reference point to those changes that followed which permitted an evaluation of the changed direction in terms of leading to the completion of the study.

The morphological approach was also useful in a number of ways. First, by dealing with each component of the transit systems it provided the participating citizens with a rather high level of knowledge and understanding of transit. Second, the Interim Report #4: Alternatives, was partially structured by the morphological approach in that it defined and analyzed the component sub-systems and discussed all plausible variations of each component; this report became known as a "handbook" to some of the citizens. Third, in being thoroughly exposed to the system components by participating in the study and referring to preliminary studies which later became Interim Report #4, many citizens were able to produce credible whole system alternatives at Workshop II (9 August 73); 40 of the citizen attendees at this workshop prepared and submitted transit system designs for the corridor. Fourth, the approach and Report #4 lead many of the citizens to increased trust in the consultant in the sense that there were no "covert" plans, and that all plausible alternatives had been covered.

F. THE CITIZENS ADVISORY COMMITTEE

The citizens who became known as the Citizens' Advisory Committee went through several stages of organization. Initially

some 70 civic and special interest groups were contacted and informed of the study prior to consultant selection. On several occasions the citizens attending the Board of Control meetings had spoken up representing, variously, their point of view or the point of view of the organization they represented. However, their need to become formally organized was generated by the issue of consultant selection.

The Board of Control (BOC) was prepared to make a selection on 19 May 72 but decided to wait one month, at the request of several citizen representatives, to permit the citizens to review the consultant proposals, interview candidate consultant teams, and make a recommendation to the BOC for consultant selection. However, it was pointed out by BART staff and several Board members that further delay would be difficult because the Golden Gate Corridor Study was already underway and was making progress without coordination between the two studies.

The Planning Association for the Richmond (PAR) is a citizens organization which had been involved in the study from its inception. PAR was in the final stages of developing a district plan for the Richmond with funds provided by the San Francisco Planning and Urban Renewal Association (SPUR). They had hired a planning consultant and, of course, were heavily participatory. In effect this was a district citizens organization preparing a plan for their district with funds provided by a city-wide citizens organization.

In November '71 BART staff were invited to a PAR meeting to discuss the NWX study. Also attending were staff from the Golden Gate Bridge, Highway and Transportation District to discuss the Golden Gate Corridor Study. It should be noted that this meeting took place well in advance of the issuing of the RFPs to the consultant teams. Agreement was reached at the meeting to provide close coordination between the two studies and that both studies would provide the Richmond residents with an opportunity to make inputs to the studies.

On 15 May 72 the Transportation Committee of PAR held a meeting and had a presentation by BART staff on the status of the NWX study; in the same month a general PAR meeting was held and, after a presentation by the Transportation Committee, it was voted that there should be no sub-surface rapid transit in the Richmond. It should be noted that PAR's planning consultant recommended against such a vote. As will be discussed later in this report, this vote became a crucial factor in determining the nature of citizen participation from the Richmond in the NWX study. Even though the Board of Control, on 11 January 72, had stressed that all reasonable modes of transit would be studied, the PAR membership may have responded to what they felt were the hidden purposes of the study: it was being administered by BART and had "rapid transit extension" in the study name.

The nature and purpose of the study had changed significantly in the five months preceding this important PAR meeting: the Board of Control had been expanded to include two San Francisco

Supervisors; the General Manager of the San Francisco Public Utilities Commission--which directed and controlled the MUNI system--was elected chairman of the Board of Control; and the study was expanded to look at all modes. What had not changed was the name of the study--it still had "rapid transit extension" in it and it was still administered by BART. It may have been possible to change the name to "Geary Corridor Study"--or some other non-prejudicial name--but one-third of the funding for the study was coming from BART which, therefore, required their administration. It should be noted that BART staff or the Board of Control at no time appeared to be "pushing" a rail extension.

PAR received the consultant proposals and on 11 June 72 held a general meeting with some attendees from the Western Addition--a predominantly black district in the center of the corridor. At this meeting the BART Project Coordinator was successful in setting up an ad hoc citizens steering committee comprised of one representative of PAR, one representing the Western Addition Project Area Committee and one representative of the city-wide San Francisco Tomorrow organization. The ad hoc steering committee became the germinal organization for the eventual formal Citizens Advisory Committee of the study. The ad hoc steering committee held six meetings over the two months dealing primarily with consultant selection, and organization of the larger Citizens Advisory Committee. On 13 December 73 the ad hoc citizens steering committee was formalized at a meeting of the Citizens Advisory Committee (CAC)--nine citizen represen-

tatives were selected, four from the Richmond, four from the Western Addition, and one from city-wide environmental groups.

A month later, 24 January 73, the CAC was formalized by the election of a chairman and the approval of by-laws.

In serving as a device for organizing the CAC and consultant selection, the steering committee made only procedural decisions, leaving the substantive decisions to the CAC. The steering committee was effective because it was a smaller body, no more than six members at any meeting, and could meet more frequently.

Perhaps the most important function the steering committee performed was the screening, interviewing, and recommending of two persons for the CAC to select as community liaison consultants. This was done in four meetings between January 5-20 and will be described in detail in the next section of this report.

Another function the steering committee performed was their evolution into the Task Review Group. The consultant requested weekly meetings with the citizens so that there could be continuous input rather than the monthly "review and revision" meetings with the CAC. The weekly meetings were important because they permitted the exchange of ideas and opinions between the consultant team and citizens and the incremental inclusion of the citizens point of view in the technical work leading to the task reports. The job of the CAC review of these reports was not so much to see only if they reflected citizen's views, but to see that they reflected the citizen's views that had been

expressed during the several Task Review group meetings relating to the task report.

Initially, the steering committee performed the function of Task Review Group but the time entailed in these weekly meetings became too demanding and their attendance dropped off. The steering committee dissolved on 12 March 72--their final meeting. From then on, the method of forming the Task Review Group was by enlisting interested citizens at each CAC meeting. The Task Review Groups for Policy Framework and Data Framework were formed at the CAC meeting of 24 March 73.

The Task Review Groups met a total of 24 times, nearly twice a month, in the 14 months that they were active (from 3 April 73 to 5 June 74). There was a total of 34 persons involved in one or more of the five Task Review Groups; a meeting would typically have between 5 and 10 persons attending. Perhaps their most important function was to give the consultants and project staff a "preview" of citizen response to the technical work and to provide some of the citizens with a detailed exposure to the work so that it would be more familiar, and thus less fearful, to them. This often resulted in the work being more acceptable to the larger body of participating citizens and perhaps increased mutual trust between the consultant and citizens.

The Citizens Advisory Committee (CAC) became the citizens "decision-making" body after it had become formalized at a meeting on 24 January 73 by the election of a chairman and the approval of preliminary by-laws. At this meeting the new chairman, who was a member of PAR and also the chairman of the Golden Gate

Corridor Study, CAC, attempted to limit voting rights in the CAC to only residents in the corridor--prohibiting the owners and employees of corridor and downtown businesses from voting. The fairness of this was questioned by some citizens and the BART Project Coordinator stated that federal guidelines would not allow such a prohibition--all affected citizens must be given an opportunity to express their views. At subsequent meetings of the CAC the by-laws concerning voting were defined and agreed upon. The basic concern of the citizens was of promoting their own self interests from two perspectives. First, there were many who had invested considerable time in the project and did not want to see their carefully negotiated achievements undone by "outsiders" or participants who came, en masse, to a single meeting. Second, there was the possibility of a "show down" between the dominant PAR group and other citizen groups such as that from the Western Addition. The result was that voting rights at any given CAC meeting were granted to those residents, employees, or property owners of the corridor who had attended at least one of the previous three CAC meetings.

There were few CAC voting events during the course of the study. Each of the four interim reports were voted on for recommended acceptance by the Board of Control. In addition, there were a number of resolutions and requests to the Board or consultant team on which there were CAC votings.

The chief negotiating power of the CAC was the potential of an adverse resolution to the Board of Control regarding the consultant's work. The basis of this power was time--by being "difficult" the citizens could slow down or stop the project. This had already happened in the selection of the consultant--the citizen's demand for participation in the selection process had delayed the project two months. The effect on the consultant can be even more dramatic depending on the consultant's work load and other factors. In the NWX study the consultant was very sensitive to the threat of delay, or to prolongation of study tasks by the citizen's demand that the consultant redo work, because the consultant had the expense of maintaining the project office and had staff assigned exclusively to the project.

While the CAC never had to resort to the resolution, the CAC was effective in achieving certain concessions from the consultant in the form of modifications to the consultant's products by simply withholding approval. This in fact occurred only once--during the definition and refinement of the five alternative concepts that were to be given further study.

The CAC was a source of information and on some occasions provided verification or modifications to the consultant's information. It should be noted that many of the citizens were professionals in several fields of relevance to the study. Several were engineers, there were finance specialists and economists; several were even trained in transportation engineering.

There were two occasions when the citizens were asked to make extensive inputs to the study--in contrast to the intensive inputs of the Task Review group. These occasions were the two "workshops"--the first on 24 March 73 regarding the policy framework for the study; the second on 9 August 73 regarding whole system alternatives for the corridor.

In the first workshop the consultant team presented a preliminary, but well defined set of policy statements organized into five categories: Transportation, Regional Factors, Residential Development, Non-Residential Development, and Environmental Quality. The 36 citizens in attendance subdivided into five groups to review the preliminary policy statements which had been collected and synthesized from regional and city policy making bodies. Each group was chaired by a Citizens Steering Committee and attended by one or more of the consultant staff and Technical Advisory Committee members.

At this workshop the consultants were asking the citizens for assistance in three areas: 1) Determining which of the official policies had widespread public acceptance; 2) Which major issues are unresolved and need further study; 3) Which major issues in the study are not addressed by any of the official policies. The result of this workshop was the clarification of many of the policy statements and the refinement of others in terms of their relevance to the study. The workshop also lead to a reorganization of some policy statements into a new category--Economic Considerations--and the need for another new category--Fiscal

Factors--for which the consultant subsequently developed a series of policy statements.

It should be noted that 24 of the 36 citizens attending the workshop had not attended any of the study's previous meetings; nearly all these were ~~not~~ from the Richmond. The Richmond residents comprised about a third of those citizens attending the workshop. This is significant because at this workshop some of the Richmond residents who were also members of PAR attempted to get the NWX study to include two PAR policies: no subway in the Richmond, and no Marin commuter transit routing through the Richmond. There was not sufficient support among the citizens to include these PAR policies in the policy framework for the study. Instead the conclusion was that the study should be open in terms of the means that would be considered in solving the corridor's travel problems.

The second citizen's "workshop" was held 9 August 73 for the purpose of receiving any ideas or plans for transit alternatives that the public might have and to serve as a forum for exchanging views concerning transit alternatives for the corridor. The consultant presented a 30-minute "lecture" on alternative transit system components--varieties of mode, guideways, stations, and routings--and gave some generalized data on the components and on the magnitude and direction of travel patterns in the corridor and city. The consultant also explained, briefly and generally, how transportation planners use this information.

Next the "open forum" was held where citizens were invited to advocate for a particular system designs favored component (e.g. mode) or voice some other concern. Twelve speakers made presentations which covered the range of possibilities and issues fairly well. It should be noted that there were approximately 65 citizens attending, of which 43 gave their names and addresses on the "sign up sheet."

Following the "open forum" each attendee was given a workshop "kit" containing pens in two colors, a street map of the city, data on vehicle (mode) types, a sheet suggesting a transit planning procedure, and a sheet explaining the organization and purpose of the NWX study. The citizens were asked to put down ideas for transit improvements on the street maps including mode to be used, routing or network and interconnections with city-wide and regional systems, and any station locations if rapid transit was being proposed. They were also surveyed on trip importance by trip purpose.

The results were, in summary: about a third favored an improved bus transit system, the rest a rapid transit/street car system with a combination of ongrade and subterranean right-of-way with the transition somewhere in mid-corridor. Thirty-seven maps were "turned in" with information on them.

Both workshops were held in mid-corridor locations and were well publicized, especially the second one. Both had publicity by direct mailing of announcements, placement of posters in public

areas--especially on the Muni busses in the corridor--and by newspaper announcements. The second workshop was more intensively publicized by these means plus several announcements on popular radio stations. It is significant that the dominant "regulars" of the Citizen's Advisory Committee--the PAR members and Richmond residents--were not explicitly supported in these wider public forums. In the first workshop the attempt to include PAR policies in the study's policy framework was resisted. In the second workshop a clear majority favored a subterranean-line-haul or rapid transit line in the corridor, although most of these indicated an exclusive on-surface right-of-way in the Richmond.

Subsequent to the second workshop the consultant spent the next eight and a half months defining, refining, analyzing and evaluating transit concepts for the corridor. During this period there were 30 meetings--averaging nearly one per week--at which citizens could make inputs or express their views regarding the work: there were 23 Task Review Group meetings, seven Citizens Advisory Committee meetings, and seven Board of Control meetings. In addition there were seven Technical Advisory Committee meetings. The result of the work during this period was a series of five transit concepts for the corridor: a "do nothing" alternative, an improved bus system utilizing various degrees of transit preferential streets, and three alternatives employing the Muni Metro light rail street car subway system--all three tied into the Muni subway in Market Street, they differed only in the relative proportion of surface and subway operation in the corridor.

This period culminated with a Town Meeting--in lieu of a public hearing--on 23 May 74. The Town Meeting was the most heavily publicized and prepared for public meeting during the study. In addition to the distribution of approximately 10,000 flyers and posters, in both Chinese and English, newspaper and radio advertizements, there was a special radio program produced by the San Francisco CBS AM station which exclusively broadcasts news program (KCBS). The program featured "the people of NWX"; there were five, five-minute episodes where the announcer made commentary and included excerpts from interviews with the consultant's staff, the Citizens Liaison Consultants, and three citizens representing the Richmond, Western Addition and city-wide interests.

The study team had also produced a four-page insert for the San Francisco Progress--a city-wide "throw away" free advertising paper. The inserts were included in some 65,000 newspapers to be distributed in the corridor a week and a half prior to the Town Meeting. The flyer publicized the forthcoming Town Meeting, gave a summary of the purpose and history of the study and gave a brief description and analysis of the five concepts for transit improvements in the corridor.

At the Town Meeting the consultant team made an extensive presentation to over 200 residents of the study area. The presentation focused on the Five Concepts and the analysis and evaluation of the Concepts. There were three general purposes of the

meeting: First, to allow the consultant team an opportunity to make a comprehensive presentation of the study findings to the general public; second, to provide concerned citizens and corridor residents with an opportunity to hear the study team's findings and react via written and oral statements and questions; third, to let the consultant team hear the citizens' points of view so that these could be incorporated into a final recommendation for the study.

The Chairman of the Citizens Advisory Committee spoke on citizen participation in the study. He told the audience who the citizen participants were, what effects they have had on the study, and what would happen after the Town Meeting. He also pointed out that, for those people who wanted to continue following the study, more CAC meetings were planned. The Citizens Liaison Consultants for the study were also introduced.

The consultant team gave their presentation of the Five Concepts and the analysis and evaluation of the social, environmental and economic impacts associated with each Concept. The format consisted of an oral presentation accompanied by several graphic aids. These included: Maps detailing the Five Concepts, slides, overlays, sketches of station locations, and an evaluation matrix.

After the presentation, written questions were presented by the audience. At approximately 10:30 p.m. there was a coffee

break. During the break, the written questions and comments were read and categorized by the consultant team. After the coffee break, several of these written questions and comments were addressed. Because of the lateness of the hour, the audience then chose to move to an oral presentation of statements made by a dozen or so citizens.

The speakers, and the audience, for the most part were clearly against anything but an improved bus system--Concept 2--in the corridor. This was reinforced by one of the speakers--the president of PAR--who read from a prepared text representing the PAR position relative to the study. This was a reiteration of the PAR policies--no subsurface form of rapid transit in the Richmond and no Marin commuter transit routes through the Richmond. The first PAR policy was directed towards two of the rapid transit concepts--4 and 5; the second was directed at Concept 5, which could accommodate a transfer, in the Richmond, of Marin commuters to the proposed subway.

Of the estimated 200 attendees, 156 signed the attendance record, giving their names and addresses. Of these 156 addresses 134 were in the corridor, 82 percent of corridor addresses (110) were in the Richmond, while only 8 addresses were in the Western Addition. Also, it was determined that approximately 30 people who signed up had attended previous NWX study citizen meetings. One way to account for this rather large one-time attendance of Richmond residents is their being invited at the previous PAR meeting and through PAR mailings.

A Task Review Group meeting was held after the Town Meeting and was rather heavily attended. A general discussion of the five concepts and the events at the Town Meeting--mostly the consultant's response to the written questions--occupied most of the meeting. The general attitude of the attendees was support for the subway concepts. Several citizens were angry and commented that the Town Meeting had not provided them with an opportunity to express their views. The reasons given for this were the limited time at the meeting and the feeling that the Town Meeting had become an anti-subway forum.

The next day, 6 June 74, the Chairman of the Citizens Advisory Committee gave a talk on citizen participation in transportation planning at the San Francisco Planning and Urban Renewal Association (SPUR). He made a number of comments about the NWX study: 1) The Citizens Advisory Committee was unrestricted in its membership (although he had personally attempted to exclude owners and employees of businesses in the corridor at a CAC meeting on 24 January 73); 2) The lack of Western Addition involvement was due to the citizens of that area not having the time to be involved and not foreseeing the effect the study might have; 3) It is worth the effort for citizens to be involved; 4) The citizens role is to inform the Board of Control on the political reality of the consultant's proposals and recommendations; 5) The citizens were responsible for the preservation and refinement of a concept for improved bus service; 6) The consultant

team is biased toward capital intensive--i.e., subway systems.

The final Citizens Advisory Committee meeting was held on 18 June 74 and was well attended. The consultant team summarized the Town Meeting and responded to 40 written questions that were submitted at the Town Meeting. A summary evaluation of the five concepts was presented along with the consultant's recommendation.

The summary evaluation was prepared and presented in four versions: 1) using the 66 criteria unweighted; 2) using the 66 criteria with primary, secondary, tertiary weightings; 3) using only the 20 criteria relating to PAR policies unweighted; 4) using only the 20 criteria related to PAR policies weighted as in the second method. In all of these evaluations the subway concepts were clearly superior to the bus concepts. Accordingly the consultant's recommendation was to implement the improved bus system--Concept 2, as favored by PAR members and many Richmond residents--as an interim solution to the transit needs of the corridor.

The interim solution was to be implemented immediately and operated for five to ten years, while more detailed study and financing arrangements could be made for the construction of a long-range solution--a Muni subway extension--on the order of Concepts 4 or 5.

The first part of this recommendation--immediate implementation of the improved bus system, Concept 2--was favored almost universally by the citizens. The second part--the subway as an

ultimate solution--was not accepted by most of the participating citizens. However, they did not object to the presentation of these recommendations by the consultant team to the Board of Control. The feeling was that even if the Board accepted and supported the long-term recommendation there would be plenty of time to fight it. In effect, the participating citizens had gotten what they wanted.

On 18 July 74 the consultant's recommendation was presented to the Board. Supervisor Molinari took the position that the Board should only accept the first part of the consultant's recommendation--immediate implementation of the improved bus system--and that the second part--the long-range Muni subway extension--should not be adopted until some indefinite time in the future. The Board approved the first part of the recommendation and accepted the consultant's request to close the project office.

Five months later, 10 December 74, the last Board meeting was held. In attendance were four new Board members replacing the previous BART Directors who had been appointed to the Board. The former BART Directors had been appointed to BART Directorship by the City Councils and Boards of Supervisors in the three counties comprising the BART district. The method of selecting BART Directors changed in 1974. The new BART Directors achieved their Directorships in the first popular election of BART Directors and typically had campaigns based on popular control of BART.

At this last Board meeting the Board, entertained and passed a motion, posed by a new BART member of the Board, to not accept the second part of the consultant's recommendation.

E. THE CITIZENS LIAISON CONSULTANTS

1. Establishing the Need for the CLC

The commitment to citizens participation in the consultant's proposal was substantial in terms of locating the project office in the corridor and in terms of a program for informal and continuous participation in the planning process. Further, the proposal stated that the consultant would actively seek and encourage participation by groups who normally do not participate in such studies; and that the consultant would share with BART the responsibility for publicizing the study; and finally that the consultant expected to participate in frequent informal meetings with citizens and citizen groups. The implications of these commitments are that the consultant intended to devote considerable staff time and study funds to public participation. Or that additional staff would be acquired which had the skills and community rapport to develop and facilitate public participation.

The RFP stated that BART would be responsible for initiating and managing community participation in the project and had allocated 36 percent of the project budget to BART project administration, coordination and contingencies, while 54 percent of the budget was allocated to the consultant's work and the remainder to other participating public agencies.

At a meeting at BART on 15 August 72 the consultant presented arguments for a community person acting as a two-way mediator-integrator between the technical study team and the community;

that this should not be a BART staff person--one that was hired by mutual consent between the consultant and community groups; and that the funds for this person's salary and direct costs should come from BART while staff support and overhead would be assumed by the consultant's project office, in which the community person would be located. BART staff did not disagree with the desirability of having a community person--later to become the Community Liaison Consultant--but felt that their budget could not absorb the cost and that the project coordinator would have to perform this function as intended.

The citizens, through a series of demands and a long process of negotiating for their interests in the formation of the study, developed what eventually became a demand for what the consultant later proposed--a community person or "community liaison consultant." At the second Board of Control (BOC) meeting, 19 May 72, the president of the Planning Association for the Richmond (PAR) insisted that the study not proceed until a citizen from the Richmond and one from the Western Addition could be appointed to the Board. Supervisor Molinari, newly appointed to the BOC to represent the interests of San Francisco, stated that he would represent the interests of the Richmond and that they would be well taken care of (Note: he made no mention of taking care of the Western Addition or other corridor communities).

During the rest of May and June the citizens became fully occupied with their role in consultant selection as discussed in detail in a previous section of this report. On 18 July 72 the

ad hoc citizens steering committee reiterated its demand to have citizens on the Board and to have a paid liaison staff to protect their interests. The committee insisted that no consultant selection should be made until these demands were met. It should be noted that the demand for citizen Board members was coming from the PAR representative and that PAR had just hired a consultant of their own to prepare a neighborhood plan for the Richmond. That is, PAR had performed the role of "client" and saw no reason why they should not become members of the "client" body for the NWX study. However, this issue was never raised again--whether due to lack of support or the credibility of Supervisor Molinari's statement that he would take care of the Richmond.

The Western Addition Project Area Committee was a product of the Model Cities' program and had experience with local residents being paid to participate in the planning and administration of local projects. Their concerns were more immediate than the Richmonds--they were interested in the employment opportunities the study might provide less than the long-range interests of controlling the study and its outcome.

At the Board meeting on 25 July 72 the Western Addition representative reiterated the demand for staff positions in the study and insisted that consultant selection not be made until there is a commitment for these positions. The Board approved the consultant selection anyway but asked the BART Project Director for assurance that there would be provisions for local employment in the consultant prime contract. Further it was agreed that these contractual provisions were to be reviewed and approved by the citizens ad hoc steering committee prior to signing.

By the 24 October 72 CAC meeting it was agreed that there would be a Community Liaison Consultant (CLC) and that this function would be a sub-contract with the consultant. However, the CLC would be directly responsible to the Citizens Advisory Committee rather than to the consultant. The consultant's contract amount had been increased by \$25,000 to allow for the sub-contract with the CLC. This amount was a budgetary transfer from BART's original amount for project administration and coordination. The consultant was to use \$5,000 for overhead costs incurred by the CLC and \$20,000 for CLC salary.

2. Selecting the CLC

At the next meeting of the CAC, 13 December 72, the ad hoc citizens steering committee was formalized by the selection of nine citizen members to comprise the committee. The steering committee was given the immediate task of selecting, with the consultant, a CLC.

The steering committee then met on 27 December 72 to review a procedure the consultant had devised for selecting a CLC. The procedure that was agreed upon at the meeting and enacted consisted of the following:

1. Placement of an ad between 31 December and 5 January 73 in six San Francisco newspapers describing the position and requesting resumes to be sent to the project office by 10 January.

2. First screening of resumes by the steering committee on 5 January. The criteria to be used: resident of the corridor; planning experience; community experience. This meeting concluded with the agreement that four applicants were acceptable to the steering committee and should be interviewed by the consultant.

3. Second screening of resumes by steering committee. Five more applicants found acceptable for a total of nine out of 116 applications.

4. Consultant interviewed the nine candidates and found six of them acceptable using three criteria: experience in community work; experience and training in planning; ability to project confidence, to be articulate and to listen.

5. Consultant made a presentation to the steering committee on 18 January 73 to explain why three candidates were not acceptable. The committee concurred.

6. Steering committee interviewed each of the six candidates in a day-long session on Saturday 20 January. Each interview lasted 45 minutes. Interviews concluded at 4 p.m. and the negotiations began between the Western Addition representative who favored the black candidate whose application he sponsored, and the PAR representatives who favored a white candidate who recently received a masters in planning and had worked in community relations and who was a resident of the Richmond. This candidate had clearly stated in his application that he was interested in helping Richmond residents to be heard in, and informed on, the study. The meeting concluded with the agreement that there should

be two CLC's--the one from and representing the Richmond, the other from and representing the Western Addition. However, the consultant insisted that one of the CLC's have prime responsibility and be the signator to the CLC sub-contract. The steering committee agreed and concluded that the candidate from the Richmond would have prime responsibility since he was the most favored of all candidates. The two candidates were informed of the decision by the steering committee and met each other on Monday 22 January 73. In the evening of that day they met with the steering committee and consultant and presented an arrangement that was acceptable to everyone: they would form an equal partnership--the Richmond candidate did not want to be responsible for the Western Addition candidate--and be joint signators to the sub-contract and they would both work half-time.

7. The results of the CLC selection process were presented to and ratified by the CAC in a well attended meeting on 24 January 73.

3. Contractual Arrangements with CLC

The CLC's signed a contract with the consultant on 5 February 73, in the amount specified previously. The other contractual arrangements of importance dealt with access to study documents, provision of office support, and termination conditions. The contract specified that the CLC had access to any and all documents produced during the course of the study but could not release them to any person without consultant approval. The

consultant agreed to provide the CLC with 200 square feet of office space and furniture; office supplies, telephone, postage and reproduction services not exceeding \$4,250; clerical assistance of approximately two hours per day.

The provisions of the agreement regarding termination of the contract were that the consultant could not terminate it without CAC approval. The CAC, on the other hand, could cause the consultant to terminate the CLC by a simple majority vote at a duly constituted CAC meeting. Therefore, the CLC's were clearly working for the CAC even though their contract was with the consultant. These provisions on termination had been inserted by the steering committee prior to their approval of it on 12 January 73.

4. Role of the CLC in the Study

The contract generally defined the duties and responsibilities of the CLC as to provide the CAC and other corridor residents with the information it needed to become effective participants in the study and to provide the consultant with information needed to effectively incorporate the CAC and other residents in the study. Further, the CLC was to organize, attend and conduct meetings with the CAC and community for their continuing and effective participation in the study; the CLC was to keep records of these meetings. They were also to attend other technical and consultant meetings during the course of the study.

R. W. SMITH
28 MAY 76

67

In order to specifically define the substance of the work the CLC was to do, the consultant included 12 task items in the CLC contract. These were related to the specific tasks and sub-tasks of the prime contract in which there was an important opportunity for community impact.

In general the consultant expected the CLC to facilitate two-way communication between the technical study team and the community. The CLC was also expected to aid the consultant in bringing in a wide range of citizen viewpoints--people who are affected by but do not participate in studies such as the NWX study.

Both CLC's had partisan sponsorship--the Western Addition CLC was black and was implicitly inclined to represent the interests of the black community; the Richmond CLC was white, but more specifically was a resident of the Richmond, and had explicitly stated intentions of representing the interests of the Richmond. The consultant's attitude was that the Western Addition had been poorly represented in the study and that special attention and effort was needed to bring their viewpoints into the study. On the other hand, the Richmond was well represented and had played a dominant role in the study since its inception. It was felt that in the interest of fairness, both CLG's would work to bring into the study the viewpoints that had not yet been heard--the black community, Japanese and Chinese communities, the elderly and handicapped and youth.

More than a month after the CLC's had started working there was a meeting of the steering committee--their final meeting-- where the consultant presented the case for bringing into the study the viewpoints of corridor communities other than the Richmond: downtown areas, south of Market, Yerba Buena and other communities. The steering committee agreed with the need for broader participation and directed the CLC's to work out an approach.

The consultant was into its third month of active work at that time--having commenced work in earnest in early January 73-- and at the steering committee meeting stressed the need for weekly meetings with a citizen group on a continuing basis. The argument that was presented was that the consultant wanted to get the community viewpoint into the work rather than having the community react to the work after it is completed. The steering committee agreed that there should be a citizens group working intimately with the consultant but the steering committee members did not personally want to commit their time to it. Other ways of forming this group of citizens were discussed and again the CLC's were directed to work with the consultant in structuring this kind of involvement. Thus the previously discussed Task Review Groups (TRG) came into being--at the next CAC meeting (the first workshop 24 March 73) a dozen citizens signed up for TRG 1, policy framework, and for TRG 2, data framework.

The CLC's were never successful in bringing in sustained citizen viewpoints beyond that which was there prior to their appointment. Despite concerted effort on the part of the CLC's the consultant and the BART Project Coordinator, there never was more than token participation from the Western Addition community. However, they were very effective and consistent in publicizing the study, which is probably the major reason for the relatively large and balanced participation at the two workshops--24 March 73: Policy Framework; 9 August 73: Alternative Transit Systems for the Corridor. The CLC's were also very effective in communicating with the CAC members and in setting up, conducting, and recording the 23 Task Review Group meetings.

On the other hand, the function of the CLC's in bringing in wide and balanced citizen input was impaired by their special interest group sponsorship, their differential abilities, and their personal biases. The Western Addition CLC had no training or experience in planning and was more interested in legal community aid than community planning. In addition, his time was limited due to his studying for the bar exam.

The fact that the Western Addition had their CLC and the Richmond had their CLC, made it possible for each to advocate the interests of their separate sponsorships without feeling that they were being unfair. This in fact contributed to the increased effect of the Richmond because the Richmond was highly organized, had a high level of planning consciousness as evidenced by the

R. W. SMITH
28 MAY 76

70

vitality of PAR, and had a resident and PAR member as the chairman of the CAC for the NWX study. In addition, the chairman of the CAC and the Richmond CLC had developed a working relationship--much like an employer-employee relationship--which permitted and eventually required a high level of communication. Perhaps the single most important decision by the Richmond CLC in effecting an imbalance in participation in the study was the inclusion of the PAR mailing list in the study's mailing list. This effectively doubled the mailing list and added more Richmond residents to the already heavily Richmond oriented mailing list.

5. DILEMMAS

There were innumerable dilemmas--or difficult problems--related to citizen participation in the NWX study. But four seem central and have been selected for further examination in this report. They also have considerable relevance to other environmental planning projects that may have a high level of citizen participation. They involve trust, citizen interest, and citizen and consultant preconceptions.

t

A. THE FIRST DILEMMA: MUTUAL TRUST BETWEEN CITIZEN AND CONSULTANT

Presented earlier in this report was a history of citizen reaction to a variety of projects from urban renewal to highway planning projects. The consultant role in these projects has almost universally been that of an instrument of some bureaucratic, administrative, or corporate purpose. The consultant was almost always put in the position of defending or advocating his client's interests from or over the interests of the community that was to feel the impacts of the projects. The result was almost a "culture of antipathy": the community views the consultants as technicians who, without feelings, serve their client's interests whatever they may be; the consultant views the active community members as political opportunists or obstructionists who are insensitive to cost and efficiency factors. The community is leery of the consultant who may not be "up front" with data

and arguments and who has been hired merely to make a project look necessary or look mistakenly of insignificant consequences. The consultant, on the other hand, is leery of community participation which may lead to project budget override--thus financial loss for the consultant firm--or may lead to a termination of the project.

While the "culture of antipathy" may have in general diminished in the past few years it still has an effect, if only in latency, and must be overcome in the initial stages of a project. It should be noted that the "culture of antipathy" drama was played out in classic form in the second phase of the Golden Gate Transportation Corridor Study--a study concurrent with the NWX study and involving many of the same citizens. A single person held the chairmanship of both studies' CACs. The citizens played their role perfectly--they formed study groups to counter the consultant's technical studies. The consultant--a large engineering firm--played its role perfectly by always using a cost and efficiency rationale and by reluctantly accepting citizen participation. The result in the Golden Gate study was a budget override and a termination of the study.

There was an initial mistrust on the part of the citizens in the NWX study, partially due to the effects of the concurrent Golden Gate Study--many citizens were "regular" participants in both studies--and partially due to the "culture of antipathy."

As the NWX study progressed there was a rapid decrease in citizen mistrust which may be due to a number of factors: 1) The consultant's proposal was clearly participation oriented; 2) The community had been involved in the selection of the consultant; 3) The consultant maintained a project office accessible to citizens in mid-corridor; 4) The community was able to hire its own staff to ensure their input; 5) The consultant had demonstrated responsiveness to citizen concerns. At a CAC meeting on 19 April 73 the chairman of the CAC praised the study team for its involvement with and interest in citizen's concerns.

However, an element of mistrust was never overcome. That dealt with an aspect of PAR member participants and their "policing" the study to see that it did not countermand their PAR policies against rapid transit (subway) in the Richmond and against Golden Gate transit through the Richmond. The consultant, on the other hand, mistrusted the PAR member participants because they seemed willing to steer the study conclusions to their purposes regardless of data and evaluations that the consultant and other citizens might make. This mutual distrust persisted through the study and is demonstrated by the speech of the PAR member participant--who was also chairman of the study's CAC--at the SPUR meeting on 6 June 74 at the conclusion of the study. He asserted that the consultant was pro-subway and would not have produced an improved bus system alternative without citizen insistence. It is difficult to find support for either assertion: there were both pro- and

anti-subway factions among the consultant staffs; there had been considerable and genuine effort by the consultant team to devise effective and desirable bus mode alternatives. On the other hand, the consultant was sensitive to the fact that the San Francisco City Planning Commission had adopted--prior to the NWX study on 27 April 72--a City Planning Department plan for transportation that included a Muni subway extension out the Geary corridor through the Richmond (Department of City Planning, '72). What the PAR member participants were insensitive to was the tremendous social and environmental impacts which the consultant demonstrated that the bus alternative would have on the Western Addition and downtown neighborhoods. They also refused to acknowledge the consultant's assertions of the eventual ineffectiveness of the bus alternative because of increasing congestion from other surface traffic--automobile, commercial vehicles and other surface transit vehicles.

B. THE SECOND DILEMMA: LIMITED PARTICIPATION EVEN WITH CONCERTED EFFORT

The study had expended considerable resources, both financial and in staff time, to the effort to secure and maintain public participation. In addition to the CLC contract of \$25,000, later augmented by \$5,000, there were additional expenses by both BART staff and consultant staff.

Despite this moral and material support the NWX study was largely ineffective in generating participation in communities other than the Richmond. Particular effort was directed toward

the Western Addition: The Western Addition CLC and second BART Project Coordinator, both blacks, spent considerable time attending a variety of community meetings and generating mailing lists; also the project office was on the edge of the Western Addition community. But this effort had no discernible effect.

The result was that the variety of citizen viewpoints that the study responded to was very limited. There was little inclusion of the minority point of view, or the point of view of downtown residential and business communities. And except for the Richmond commuter, there was no input from mid-corridor, city-wide, and regional commuters. The U. S. Department of Transportation's mandate that all affected citizen groups have input into the study was not met. But it should be obvious at this point that it was not met because of consultant or project administration resistance to such input. The reason is a complex relationship between a number of factors including: 1) The low level of development--or primitiveness in the "state of the art"--of citizen participation techniques in general in the fields of environmental planning; 2) A provincialism which permits, and encourages, discrimination against "outsiders"--thus the advocacy of local interests over wider public interests or the interests of other localities. This may take the specious form as in the PAR policy against Marin commuter transit through the Richmond District, thus forcing it on the Marina District, or the more general form as in the discrimination of San Francisco

citizens against regional commuters to the downtown; 3) The domination of the Citizens Advisory Committee and its chairmanship by PAR members and Richmond residents; 4) The posture of BOC member Supervisor Molinari who singled out the Richmond as having his special attention and concern, leaving the rest of the communities in the corridor with no "champion" on the Board; 5) The structural and personal biases of the CLC's--the Western Addition CLC focusing his attention, to no avail, on bringing his community into the study; the Richmond CLC performing an unneeded advocacy for the Richmond, thus strengthening their domination of citizen participation in the study.

C. THE THIRD DILEMMA: WORKING AGAINST CITIZEN ORGANIZATION PRE-CONCEPTIONS

The specific pre-conception of concern here is the PAR policy against a subway in the Richmond. This policy was formed in response to the initiation of the NWX study. It is interesting to note that as the study moved forward from its administrative inception it progressively became more open. Initially it was to be a rail rapid transit extension, then simply a rapid transit extension, and finally a study to determine alternative transit improvements in the Geary corridor.

The PAR member participants, on the other hand, fixed their minds on a policy with significant consequences prior to the commencement of work by the consultant team. Moreover, they did this without the study of alternative measures to protect their

neighborhood--the basis for their policy was to prevent a subway which would induce growth. Further, they did it over the objections of their own planning consultant.

Perhaps the most damaging effect the PAR policy had was on the PAR members who participated in the NWX study. As representatives of PAR they had fixed their positions such that any openness on their part that might lead to a need to change their policy would be "backing down," losing their credibility as PAR leaders. Their fixed position took on the aura of "don't try to fool us" with the study of alternatives. They were not even interested in investigating the consultant's evaluation of the five NWX study alternatives utilizing only the PAR related criteria.

D. THE FOURTH DILEMMA: BREAKDOWN OF THE MORPHOLOGICAL DESIGN PROCESS

1. Refusal of the CAC to Rank Criteria

The citizens had participated in a very fundamental way in the definition and refinement of criteria to be used in the eventual evaluation of alternatives. This had been a relatively drawn out process--spanning nearly three months--involving the Task Review Group and the full CAC. The result was Interim Report #3: Criteria, about which there was generally good feelings among both consultant and citizens.

The next step would have been to rank the criteria. This was an essential step in the morphological approach because

criteria are used to formulate variations in system components and often it is necessary to choose between conflicting criteria in the development of a particular variation. Also, especially when there are a great number of criteria--66 in the NWX study--it is often only possible to work with a few criteria when assembling components and utilizing an incremental "best performing" evaluation to guide the aggregation of components into a whole system alternative.

However, the citizens--or at least the chairman of the CAC--at a Task Review Group meeting on 4 June 73 asserted that it was impossible to rank criteria without first seeing the alternatives. A month later, the chairman of the CAC, in a discussion with consultant staff, made a forceful reassertion of the undesirability to rank criteria without first seeing alternatives. He could not be moved from this position and further asserted that there were five or six obvious alternatives and that the study should get on with them. Also, that the citizens were getting impatient with the abstractness of the study, that it was becoming difficult for them to participate in it.

The last assertion was taken to heart and became an important factor in the restructuring of the project. However, the assertion that there were five or six obvious alternatives (e.g., the good, bad, and ugly, etc.) suggests that the motive for not ranking criteria may have been the avoidance of a process which might show the PAR posture to be self contradictory and

therefore untenable. This might have resulted if the citizens had participated in the ranking of criteria and had come to agreement on a set that would later show a subway in the Richmond to be the superior alternative.

2. Abandonment of the Morphological Approach

As noted earlier, there were problems amongst the firms that comprised the study team. Rather than following the Project Organization and Structure, they were, understandably, following their sub-contracts which were ambiguous and did not clearly spell out the morphological approach. There had been a significant level of disagreement among the prime consultant staff and between the prime consultant and major sub-contractor regarding the nature of criteria, the method of their determination and use. In addition, the work in the project was beginning to fall seriously behind.

These factors, together with the citizen's reluctance to rank the criteria, and their complaint that the study process was too abstract, lead to the decision to abandon the morphological approach. However, there was not a capitulation to the "5 or 6 obvious alternatives" approach. System component definition, analysis, and evaluation was engaged in, but not rigorously, involving the citizens in a newly formed Task Review Group. This resulted in a fairly high level of knowledgability on the part of a dozen or so citizens and provided a basis for technical

communication between them and the consultant. This approach changed at the second workshop, 9 August 73, where the citizens generated 40 alternative transit concepts for the corridor. These, together with eight concepts generated by the consultant were screened, combined, refined and reduced to eight concepts for the corridor. These in turn were reduced to five concepts which were then highly defined and subjected to an extensive analysis and evaluation utilizing the entire set of 66 criteria.

Prior to drawing implications and conclusions regarding the four dilemmas--as central issues of citizen participation in the NWX study--an analysis of census data relative to the participation roster will be made. This analysis comprises the next section of this report.

FAMINTS	-70.657756	55.886572	1.5984709
			.232
(CONSTANT)	-17.208877	17.825958	.93196433
			.355

This regression indicates that non participation, or "resistance" to participation, in a given tract, is strongly associated with a large number of rental units in the tract and next, a high mean market value of owner occupied homes, together with a low unemployment rate and possibly a low number of families with children.

D. CONCLUSION - FINDINGS OF THE REGRESSION ANALYSIS

According to the regression analysis of participation in the NWX study, the most significant factors associated with participation in order of importance are: adults with a college education, persons who drive to work or take a taxi and, surprisingly, the lack of owner occupied homes. On the other hand, "resistance" to participation is associated with a high number of renter occupied units, a high median market value of owner occupied homes and the lack of unemployment.

Some of these findings are corroborated in other research and are otherwise generally accepted... Persons with college education tend to be more future oriented than those without college education (Schneiderman, '63) and tend to be more aware and have more information about general community problems (Suchman, '67; Rosenstock, et al., '66; Medalia, '64). The

incidence of drivers to work and taxi riders to work is clearly specific to the corridor--at least in the case of taxis--and may reflect the dissatisfaction with transit service, thus the auto is used, but the user increasingly feels the degradation of auto access to work. Thus the motivation to participate in a study to improve transit in the corridor.

The finding that home value is inversely associated with participation is surprising because it is commonly held to be the other way around--the homeowners have more "at stake" in their homes and therefore take measures to protect their homes by being involved in relevant neighborhood actions. This notion is also reinforced by the notion of length of tenure in owner occupied homes. The findings in this study do not confirm these notions. Moreover, the not strong but inverse relationship between high family income and participation in the CAC LIST regression tends to confirm this. The findings in this study are, however, in apparent conflict with other studies which find a direct relationship between income and participation (Hodge and Treiman, '68; Sharkansky, '68; Zikmoud and Smith, '69).

Homeowner participation or non participation provides no logically inverse relationship to the participation of renters, that is the behavior of these sets may be independent. In this study the incidence of homeownership having an inverse relationship to participation in no way contradicts the finding that a high incidence of rental units is associated with non participa-

tion. The homeowner may choose to protect his home by means other than or in addition to participating in planning studies. On the other hand the renter may feel that there is nothing at stake and therefore why participate? The appearance of home value in the non participation regression suggests that the higher the home value the more likely the owner is to engage in other means of protecting his home than by participating in a planning study.

Employment and the lack of unemployment are of course different things. The finding that the lack of unemployment is associated with non participation has no clear explanation. Again, however, one should not assume the obverse--high unemployment to be associated with participation. Low participation, where there is low unemployment, may be explained by the obvious--working people don't have the time--or perhaps by the low- and upper-income families not experiencing unemployment to the degree that middle-income families do, and that low- and upper-income people are typically non participants.

E. LIMITATIONS OF THE REGRESSION ANALYSES

Typically regression equations are used to predict events or describe phenomena defined by the dependent variable. In this manner the product of the second regression would be:

CAC LIST = .026 COLLEGE + .61 TAXI - .039 WALKED - .031 FAM 3

or in English: CAC membership in a given tract is estimated to

be equal to .026 times the number of persons 25 years or older with one or more years of college, plus .61 times the number of persons taking taxis to work, minus .039 times the number of persons walking to work, minus .031 times the number of families with incomes greater than \$15,000, minus 12.67.

However, there is nothing that can be predicted with this equation. The NWX study can not be repeated, or "re-run"; the personalities, issues, techniques and factors associated with another study in the corridor at some future time would change drastically as an indeterminant function of time; and the conditions in any corridor are so different that the equation could not be used there either. The use of the regression equation in this study is only to determine the factors associated with, and the strength of association with various levels of participation. The regression analysis is used rather than simple correlation matrix because it provides a method of determining multiple associations with participation.

7. IMPLICATIONS AND CONCLUSIONS

A. IMPLICATIONS OF THE STATISTICAL ANALYSIS

Given the findings of the regression analysis a participation program could be drawn up, with the aid of relevant census tract data, that would maximize the amount of participation for the time and money spent. That is, one could use the CAC LIST regression to determine which of the tracts in the corridor would be most responsive to recruitment for participation in the study. This could be done by making a direct application of the formula and converting the output to an index of probable participation. Or it could be done simply by putting effort into the tracts with a high proportion of college education and staying away from tracts with a high proportion of renter occupied units.

However, this approach would do little more than give the appearance of a successful participation program--large numbers of participants for the effort spent. It would do little in terms of the purpose for citizen participation--the inclusion of a broad range of viewpoints representing those affected by a proposed transit plan.

Therefore, the opposite approach is suggested--commit resources to the areas where participation is shown to be unlikely or at a comparatively low level. This assumes that the partici-

pants from the high participation areas would generally participate regardless of efforts by the study team to recruit them.

The regression analysis has provided a basis for determining which areas would require special effort in order to obtain a useful level of participation. But it should be noted that the area of the regression analysis is predominantly a white middle class area that is comparatively family oriented for San Francisco. The Western Addition, other minority areas, downtown residential areas, businesses, and commuters were not included in the analysis for lack of data on their participation.

Therefore, the approach needs to be modified: the regression analysis may be useful in determining which areas of predominantly white middle class districts in San Francisco may be participation or non-participation oriented but other means of assessment would have to be used for districts which are not of the white middle-class category.

While it is beyond the scope of this study to be rigorous on means of assessing the likelihood of participation in areas different than the Richmond, some observations can be made. The comparative data on the Richmond and Western Addition presented in the first part of Section 6 of this report showed the Western Addition to be different in many respects. The population in the Western Addition has a markedly lower income and fewer persons with college education than the Richmond. The

citizens steering committee member from the Western Addition commented that his people were more concerned with issues like food and shelter than transportation plans. This assertion is a commonly held point of view and is supported by research (Schneiderman, '63; Bonem and Reno, '68; Douglass and Moss, '68).

The Western Addition also shows a greater proportion of renter occupied units, higher vacancy rate and shorter length of tenure than the Richmond. These factors, together with the lower income and educational attainment argue for a considerable lack of interest in a future oriented transit study like the NWX study. The evidence clearly suggests that the form of citizen participation used in the NWX study could not have secured participation from the Western Addition regardless of effort. The implication is that a different form of citizen participation was called for. A form that went to the people rather than having them come to the study. Or a representational form in which voting would be done by the steering committee rather than the larger citizen's committee.

B. THE DILEMMAS: WHAT HAS BEEN LEARNED, WHAT COULD HAVE BEEN DONE?

The First Dilemma: Mutual Trust Between Citizen and Consultant. There is no indication that anything could have been done to increase trust in the study except perhaps an expansion of a sense of fairness on both sides. The "culture of antipathy"

was effectively non-existent shortly after work in earnest began in the study. By April 1973 the citizens felt the consultant was genuinely open to their input.

But the consultant perceived the principal concern of the dominant participant group to be the NWX study's confirmation of the PAR policies and the general service of the Richmond's interests over the interests of other communities in the corridor. The question of fairness was rarely raised and was perhaps interpreted differently by the consultant and dominant citizens group. The consultant was concerned with fairness in the product of the study, the citizens in the process of the study. The citizens felt that everyone had an opportunity to express their point of view and have it incorporated in the study. If the Western Addition community did not participate it was by choice and if they let the Richmond dominate the study then it was fair that the study results reflected the Richmond's interests.

For the study results to be fair the study would have had to ensure the inclusion of the points of view of all communities in the corridor. The evidence suggests that this would not have been possible with the actors and organization that the study had. The specific factors that promoted or permitted the dominance of the citizens' involvement by the Richmond and PAR interests was the active participation on the Board of Control by Supervisor Molinari; the effectiveness of the Richmond CLC and

the vitality and clarity of purpose of the Richmond/PAR members of the steering committee and CAC.

The Second Dilemma: Limited Participation Even with Concerted Effort. The evidence suggests that the moral and material commitment to citizen participation in the NWX study was ineffectively used. The obvious conclusion is that the type of citizen participation employed in the NWX study is currently effective in attracting only a certain segment of the socio-economic continuum--white, middle income, middle aged, educated persons.

To secure the input of the other communities in the corridor other means would have to be used. The study should not have had a duly constituted CAC which could vote, pass resolutions, and dominate the citizen's participation part of the study--i.e., be the "official" citizen's organ. The CAC should have been organized as either a representational body or as an adjunct to the citizen's participation program.

As a representational body the CAC would have a steering committee with members representing the various communities in the corridor--including commuters and "big" business. Each member of the steering committee would be responsible for representing the point of view of his community. The point of view of the community could be expressed in meetings like the CAC meetings or could be made known to the representative by surveys or through his own network of contacts in the community.

As an adjunct to the citizens participation program the CAC would be one of many forms for the expression of citizen's viewpoints. Such a program would depend on the effectiveness of a role such as the Community Liaison Consultant in creating or utilizing other forums. Other forums could be the normal meetings of other community organizations in the corridor. The CLC could manage to be invited to these meetings or otherwise get on their agenda and present the study or some aspect of it. The result might be direct feedback during the presentation or the generation of interest such that a special meeting of the organization could be devoted to the issues generated by the study. The role of the CLC would be to expose the study, and study-related issues, to the communities that might be affected by the results of the study, and to see that the point of view of the various communities is considered in the conduct of the study.

The Third Dilemma: Working Against Citizen Organization Preconceptions. There is no evidence that suggests the BART project administration or the consultants ever took the PAR resolutions seriously - which they should have, given the dominance of the PAR attitude in the CAC. Given the PAR resolutions against a subway in the Richmond, and against Marin commuter bus routes through it, the study team should have addressed these resolutions immediately or the citizen participation program should have been reorganized.

In addressing the PAR policies, the study team would not have had to argue whether they were good or bad policies but that they were adopted without study, against the advise of PAR's own consultant, and largely in emotional response to a misinterpretation of the purposes of the NWX study. The study team could have demonstrated that the PAR policy against Marin commuters could have been nullified by a like policy from the Marina District Citizens Organization, as the busses must go through either the Marina or the Richmond. In a similar manner, it could be hypothesized that had the Western Addition been as well organized and as provincial as the Richmond, they might have adopted a policy against Richmond commuter busses through the Western Addition, and that any intensification of transit service in the corridor would have to be a subway through the Western Addition.

The Fourth Dilemma: Breakdown in the Morphological Design Process. Although the citizens had refused to rank the criteria and had complained about the abstractness of the process, there are other important factors in the abandonment of the morphological approach. First, the study was behind schedule by about two months in the fourth month. That is, the policy framework and criteria had taken twice as long as scheduled and since they were both very abstract in nature, the citizens may have reached their "saturation" point with respect to abstract processes by the time that they were completed. Secondly, there was never

complete agreement or support for the morphological approach on the consultant staff, and the sub-contracts did not concretely support the approach.

Perhaps the morphological approach can be described as the consultant's preconception, as professionals often do have preconceptions regarding methods and even solutions. However, the nature of the RFP-proposal-contract cycle imposes the requirement that the approach be "preconcieved" and to a very high degree of detail. An alternative, and almost methodologically opposite approach, is that described as "hillclimbing" (manheim, '68) where a solution to a problem is defined immediately in the beginning of the study. The solution is then subjected to incremental, negotiated changes until it reaches its "final" form. (or the participants loose interest or the budget runs out). While this approach might be useful in developing citizen interest in concrete alternatives, it is limited to highly specific problems, such as highway route location.

In the NWX study the "hillclimbing" approach would have had to take two directions in the beginning: an improved bus system, and a rapid transit system. In actuality, the morphological approach was converted in the NWX study to something very similar to the "hillclimbing" approach. After the components to transit systems were preliminarily investigated they were quickly aggregated into whole systems which were subsequently refined into eight concepts. These eight concepts were then

incrementally refined and negotiated, in the manner of the "hillclimbing" approach, resulting in the final five concepts.

C. CONCLUSIONS: IMPLICATIONS FOR THE STRUCTURE AND CONDUCT OF TRANSPORTATION PLANNING IN THE BAY AREA

1. Perceived Need: A Call For Reconnaissance

The NWX study was conceived as a rail rapid transit extension from the BART or Muni rail systems under Market Street in downtown San Francisco - "an extension of the 75 mile BART/Muni rapid transit system". The study concluded as a transit improvement study for the Geary corridor. In other words, the study was conceived remotely from the real issues in the corridor, or the perceived need for the study was different for BART administration than it was for the people who live in, or "use", the Geary corridor. While there are historical and perhaps bureaucratic reasons for this mis-match in perceived need, it should be recognized as something that can and should be avoided. The suggestion here is that prior to, or as an initial step in, any corridor study, BART or any transportation planning agency should engage in a reconnaissance study of the corridor. The reconnaissance study should be aimed at determining the social, economic and political issues associated with or relevant to an improvement of the transportation facilities in the corridor.

Had this been done in the Geary corridor, there could have been a pre-study determination that a BART extension would be inappropriate; that the transit improvement must therefore deal with the Muni system, either as bus or light rail; that some sort

of coordinated system would, or would not, be established with Golden Gate Transit; and that the corridor contained an extraordinary number and variety of communities and special interest groups which would impose special requirements on a citizen participation program.

This is not to say that the half million dollars spent on the NWX study was wasted. However, had a reconnaissance study been executed, the subsequent study could have been more to the point - it could have been done for less money, or the study could have been more definitive in its conclusion.

2. The Request For Proposal (RFP), Proposal, And Contract Work Program: The Need For Continuity And Integration

The events associated with the reconversion of the proposed work program back into the format of the RFP suggest that it was a mistake to do so. The events suggest that the BART project coordinator should have left the consultant to work out his own contract work program and associated sub-contracts. Or he should have participated in the drafting of the sub-contracts as well as the prime contract in order to achieve clarity, consistency, and completeness in the prime and sub-contracts as an integrated set.

As it was, BART ambiguously shared responsibility with the prime consultant for the development of the prime contract work program. However, BART took a "hands off" attitude in the development of the sub-contracts saying that BART is only interested in

the work the prime contract specifies - if the prime contractor wants to sub-contract part of the work then the specifics of that arrangement is between the prime and sub-contractors.

However, it is in the interest of BART to have a well run project and completely executed work program. Therefore three suggestions relevant to this issue will be made: 1) BART should specify on issuance whether the RFP is "tight" or "loose". Tight, meaning that its requirements must be met in substance and form. Loose, meaning that only the substance of its requirements must be met. An argument for the loose RFP is that many consulting firms have developed specialized techniques which are tailored to their staffs and with which they are most effective; 2) If a consortium of consultant firms are entering a joint proposal then they should be required to specify in the proposal how the fee will be portioned among the firms, the total staff time each firm will commit to the execution of the work program, and the general, or specific if possible, role each firm will play in the execution of the work program. The purpose of this second suggestion is to prevent the deleterious effects that the bickering and resultant bad feelings that almost always occur when consortiums are successful in obtaining a contract without pre-specifying "how the pie will be divided". 3) BART project administration should play either an active role or a passive role in the transformation of the proposal into prime and sub-contract work programs. The basis for this suggestion is to eliminate the ambiguous definition

of responsibility in this process which contributes to the confusion surrounding the attempts to produce a well integrated set of contract work programs.

3. The Board Of Control: The Need For Appropriate Representation

One of the factors affecting the dominance of the Richmond/PAR citizen group in the NWX study was the advocacy for that group by Board member, and San Francisco supervisor, John Molinari who was also a resident of the Richmond. Although supervisor Gonzoles had also been appointed to the board, he only attended one meeting and that was very early in the organizational stages. Had there been a supervisor appointed to the Board who would have represented the interests of the Western Addition as clearly as Molinari had represented the interests of the Richmond, and had there been a representative for the downtown interests, the study might have been more balanced on the issues it addressed. It seems obvious that in a study which cuts across three or more major communities there should have been an active representative for each of these communities in the client body for the study - the Board of Control.

Therefore the Board members should be selected after the reconnaissance study has been completed. This may mean that in studies like the NWX study which require a joint powers agreement - and thus a Board of Control - a provisional Board should be set up until the nature of the permanent Board can be determined.

4. The Citizens Advisory Committee: Helpful Only In Certain Contexts

From the evidence in this study, one could conclude that a CAC, as in the NWX study, should be used but only when the corridor population is homogenous, and only when it is almost exclusively middle income, middle aged and well educated. If wide participation is sought in studies like the NWX study, which involve a wide range of ethnic and socio-economic communities, other forms of participation will have to be employed. The form of the citizen participation program should be one of the major issues to be addressed in the reconnaissance study. Accordingly, the form, or structure for, citizen participation should be set only after the completion of the reconnaissance.